NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

NAPPONAL ASSOCIATION OF

FIRST YEARBOOK

of the NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

Edited by H. V. CHURCH

Secretary of the Association

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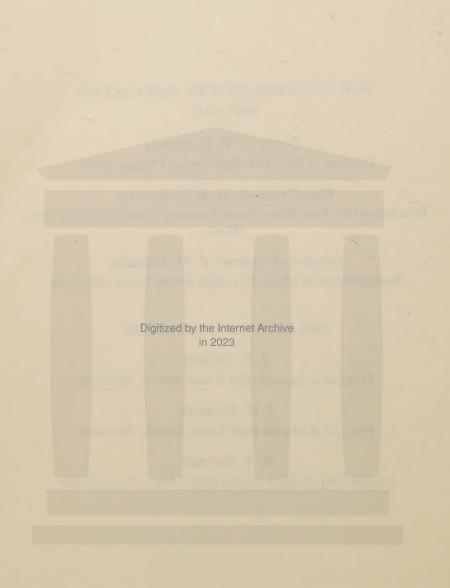
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NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

HISTORY OF THE FORMATION OF THE ASSOCIATION

The National Association of Secondary School Principals was conceived at the meeting of the Department of Superintendence of the National Education Association at Detroit in 1916. On Wednesday evening of that meeting a few Illinois high-school principals separated themselves from the throng of superintendents and withdrew to the Cadillac Hotel for a sort of educational fasting and prayer. C. P. Briggs, of Rockford; L. W. Smith, of Harvey; K. D. Waldo, of East High School, Aurora; W. L. Goble, of Elgin; and H. V. Church, of Cicero, were present. It was decided then to call together some of the high-school principals, not only from the Middle West, but from all parts of the United States, who were then at Detroit, to discuss the advisability of forming a Department of Secondary School Superintendence. The men met the next day with H. E. Brown, of Kenilworth, Illinois; Tesse B. Davis, of Grand Rapids; Milo H. Stuart, of Indianapolis: W. D. Lewis, of Philadelphia; T. H. Briggs, of Columbia; Charles Hughes Johnston, of Illinois; and C. H. Judd, of Chicago. C. P. Briggs, as secretary of this informal conference, reported as follows:

A meeting of high-school principals was called in the Hotel Statler at 4:30 on Thursday afternoon, February 24, 1916. A temporary chairman was appointed in the person of H. V. Church, principal of J. Sterling Morton High School, and a temporary secretary, C. P. Briggs, principal of Rockford High School. The purpose of the meeting was to develop and further a feeling of class-consciousness among high-school principals; to develop a professional spirit on their part; to study curriculum problems of administration; and to be looking forward to certain standards

and tests of efficiency for high-school subjects as a basis for survey work. The purpose of the meeting was discussed by Principal Brown, of New Trier High School; Dr. Judd, of the University of Chicago; Dr. Johnston, of the University of Illinois; Dr. T. H. Briggs, of Teachers College; and Principal Davis, of Grand Rapids. After much discussion a motion was made by H. E. Brown that provision be made for a high-school administration department to meet with the National Superintendence Meeting at Kansas City next year in February. This was carried. This motion carried with it the appointment of a committee which was to make arrangements for the program for this meeting. This committee consisted of Mr. Church, principal of Morton High School, Cicero, Illinois, Chairman; Mr. Lewis, William Penn High School, Philadelphia; Mr. Davis, of Central High School, Grand Rapids; M. H. Stuart, principal of Technical High School, Indianapolis; and C. P. Briggs, principal of Rockford High School. The meeting was a most enthusiastic one. It was the hope of the men present that all high-school principals will enter into the work of this department with a zest and a vim that will make it really worth while.

The movement took on a new and added impetus at the meeting of the North Central Association of Colleges and Secondary Schools held in March, 1916, at Chicago. Principal B. Frank Brown, of Lake View High School, Chicago; Principal J. Stanley Brown, of Joliet, Illinois; Principal Benjamin F. Buck, of Senn High School, Chicago; and Principal C. P. Briggs, of Rockford, Illinois, at an informal conference on the desirability of securing for the high-school principal the recognition that he deserved, decided to call a meeting at a later date and perfect an organization. In accordance with this understanding a letter was sent to a number of the principals in the Middle West calling a meeting to be held in Chicago, April 16, 1916. Seventy-eight principals, representing seven different states, responded to the call. A permanent organization was made and the following officers were chosen: Principal B. Frank Brown, Lake View High School, Chicago, president; Principal M. R. McDaniel, Oak Park High School, Oak Park, Illinois, vice-president; and Superintendent F. M.

Hammitt, of Mason City, Iowa, secretary-treasurer. These officers with the addition of three others constituted the Executive Committee. The other members of the Executive Committee were: Principal J. Remsen Bishop, of Detroit, Michigan; Principal Jesse H. Newlon, of Lincoln, Nebraska; and Principal H. V. Church, of Cicero, Illinois.

FIRST ANNUAL MEETING OF THE ASSOCIATION

The first annual meeting of the National Association of Secondary School Principals was held at Kansas City, Missouri, Monday, Tuesday, and Thursday, February 26 and 27 and March 1, 1917.

FIRST SESSION

The first session, Monday, February 26, 1917, was called to order in the Banqueting Room of the Coates House, at 2:00 P.M., by the president, Principal B. Frank Brown, Lake View High School, Chicago, Illinois.

The President gave the first annual address, as follows:

PRESIDENT'S ADDRESS

Ladies and Gentlemen:

It is certainly most gratifying to find so many principals of secondary schools present at this, the initial, meeting of our new organization. It makes us all the more certain that there is a need of closer co-operation and organization among those who administer the affairs of the public and private high schools of the country. We have long had organizations in which we have had the privilege of membership, but this is the beginning of one which is to be devoted primarily and exclusively to our own interests and needs.

We have been identified with the National Education Association along with the high-school teachers in the Round Table, many of us have had membership in the Associations of Colleges and Secondary Schools in the Eastern, the Southern, and the North Central states, but these have not satisfied the needs of our profession. However, in the National Association of Secondary School Principals we shall find an organization devoted entirely to our interests and wholly within our direction and control. I cannot understand why we have been the last in the great profession of teaching to come to our own.

As the first president of the Association it is my privilege to outline in a brief way some of the reasons for organization. Judging from the experience of the past I very much fear that we have not fully realized

the wonderful opportunities that come to us, or the heavy responsibilities that rest on our shoulders.

The lack of professional consciousness among the high-school men and women has been the subject of comment, not only among our own numbers, but also among all intelligent people who are in touch with educational affairs. We have been content to play the second fiddle at most, and many have had no part at all in the educational activities of the present day.

Too often we have been content to work at our own peculiar problems as if our schools or our system of schools were absolutely free from all relation with the rest of the world. True, our problems are quite different from those of general superintendence and from those of the colleges, but, notwithstanding the fact that local conditions may modify them somewhat, the problems of secondary education are the same generally throughout all the states. In all this there is need for careful consideration and co-operation.

The growth of the public high school during the last twenty years has been beyond the expectations of all, even of those educators who have been most closely in touch with school work. Those who have only a remote or indirect relation with the system are practically lost amid the great changes that have taken place, and no longer understand the needs and opportunities of the great present-day institutions that offer greater advantages than most of us enjoyed when we were in college, and the administration of which requires more tact and executive ability than was required of the college president a few short years ago, and, as some of my colleagues have said, even of today.

Fellow-principals, the work which we are called upon to do in fitting young America for citizenship, for the home, and for the great whirl of modern business is second to no other profession in the world. Are we conscious of the proper professional spirit? Have we the proper professional attitude?

No longer should men and women interested in the administration of secondary schools be content to accept ideas and direction from those who are not in a position to understand their needs, or from those who are actuated by ulterior motives.

The old theory of education, in which the pupil has been judged by his ability to remember, is bound to be displaced by the demand that our schools shall be so organized that there shall be a development of power, that we shall turn out a product with the ability to think and the power to do the job the world has for it to do in a creditable manner.

The former idea was imposed from above and is still holding on like grim death, but the signs of the times show that its days are numbered. Relief must come largely through the efforts of secondary-school men, and this new spirit of union and co-operation will furnish the moral backbone to enable us to make the public high school conform more nearly to the needs of 100 per cent of our pupils than to 5 or 10 per cent of them.

All the great professions have effected their own organizations, and in every instance history shows a marked change in the development of professional spirit dating from the birth of the organization. We have been the last among educators to realize the need of co-operation and organization, but the right step has been taken, and the first and greatest good that will come to us will be the development of that strong professional consciousness which will spread new life and vigor into every school here represented, and will make our organization take its proper place professionally in the educational world and become an important factor therein.

As I said before, progress in secondary education has been rapid, paths have been marked, and changes have been made with which it has been hard to keep pace. Big systems have developed along different lines, and even individual schools have had their own peculiar problems and have grown up catering to the needs of differing communities. Therefore it will be most profitable for us to have a time and a place where we may have those differences discussed and the benefits explained.

Many progressive schools are busy trying out new ideas in teaching, new experiments in administration, constantly striving toward higher ideals and toward turning out a more satisfactory product for the community. Here is a forum where we can hear the successes and receive warning from the failures. Here it is that those principals who have initiative can bring to the educational world the results achieved along the lines of their newest endeavor. However good our own schools may be, however effective our own administration may prove, I am sure that we can take away from this meeting of men and women who administer the great high schools of the country new ideas that will make us better principals and our schools more satisfactory institutions to our communities.

As we talk with the men and women from various parts of the country we find that practically every one of them is conducting some interesting experiment in his school and is more than glad to tell us about it if we but show interest. Some of these features are still in the experi-

mental stage and are not ripe enough for conclusions that will be valuable, while others have been thoroughly tried out and are ready for report. You will notice that one afternoon on our program will be given to this idea. From my own point of view this can be made perhaps the best feature of our future programs. Numerous ideas still experimental come to my mind, such as:

- a) A satisfactory method of bringing subject-matter in history into the realm of the pupil's experience so that it may become real, and may not be a matter of memory.
- b) To devise a type of examination that will show development of power in the subject during the course.
- c) To work out a system of credits that will be fair both to the pupil who does excellent work and to the pupil who does only fair work.
- d) To work out also a system of credits that will discourage Seniors and Juniors from electing studies of the first and second year in order more easily to obtain the necessary credits for graduation.
- e) To discuss the changing conceptions of schooling and education with reference to the demand for the development of the power to meet the problems of life successfully.
- f) To emphasize the social side of high-school life and give it a proper place in the school program.
- g) To find the best method of presenting instruction concerning the advantages and disadvantages of various vocations.
- h) To find an answer to the question of credit for work done independent of public-school supervision.

You have in mind many others, and each one probably has some contribution to make to the great wealth of experience that may be ours for the asking. It is a wonderful opportunity for the exchange of educational ideas, and if this organization becomes a great clearing-house for such exchange it will well prove the worth of its being.

The high-school principal's place in the community is one of respectability at least. Whether he is a power in educational and moral affairs depends upon the character of the community and the personality of the principal. Let us hope that his position is already one of influence.

We have all seen the effect of the power exerted by other educational organizations when their official opinion has come to the public and to our superior officers, the members of our boards of education, on matters of educational policy. So it should be. This is the day of expert opinion. Members of our boards of education do not as a rule profess to be educational experts, and usually are willing to be guided by the

best expert opinion available. The bigger and broader the mind the greater the respect for the expert in any field of activity. Yet we have all types in the world. Men in business and women in the homes all have the highest regard for the opinions of the trained man.

Will it be hard to see how the backing of such an organization as this will assist you in bringing about desirable educational changes in your school, or how it will aid when you wish to resist encroachments upon the field of your endeavor? With our superior officers and with the general public the recommendations of our organization will have great weight, because those recommendations will represent the consensus of expert opinion in secondary education and will be received as such.

Our place in the educational world will be greatly improved by organization, because of the simple fact that we shall from now on act intelligently and unitedly. We shall no longer be the tail of the dog to be wagged at the pleasure of influences that have dominated our secondary schools. We shall receive considerate treatment at the hands of some who have hardly been aware of our official existence. Instead of having it handed down to us where to get off, we shall now be in the position of at least discussing the advisability of getting off. If we have been ignored professionally in educational matters it has been our own fault. No one should share the blame. We have had all the consideration shown us that we have deserved. We have never had the professional courage to resist, except as individuals, and as a consequence have had to take whatever came our way. Such a state of affairs can never exist again. Hereafter united action, resulting from organization, will invite consideration and co-operation on the part of those who have hitherto passed us by.

From now on, under the guidance of such men and women as are present today, the National Association of Secondary School Principals will become an organization that must be reckoned with by all. We shall now take our place among the organizations that are dictating the educational policy of the schools of today. We are to stand for the best interests of secondary education from coast to coast without fear or favor. The strength that comes from union must be for the protection of the children against the encroachments of all who seek to exploit the public high school for personal benefit. No one principal, standing alone, can hope to combat the power of organized influence, for it might spell disaster to his school and to himself because the public does not always understand motives. This then is the third great gain to come from organization—our increased influence with the general public, with

our boards of education, and with other educational organizations with which we come in contact.

For eighteen years I have attended the meetings of the North Central Association of Colleges and Secondary Schools and have watched with interest the changes that have come about within the organization and the results of its efforts. It has undoubtedly accomplished much good and under proper direction is still capable of much good.

During these years, we have been examined, inspected, and reported. The reports have been cumbersome and the method of inspection frequently irritating, but—glory be—we have been accredited, and we are informed that the exhaustive and also exhausting report will be good, at least some of it, for several years.

I have no quarrel with the principle of inspection—I am friendly to it and even advocate it. It has proved a benefit to the high school in more ways than one. Many a principal has been able to use the *prospect* of a non-accredited school as a club over the head of the board of education to bring about desired reforms and better working conditions in his school. It has undoubtedly wakened some principals themselves to the fact that this is an age of progress, that the old methods and ideals no longer fit the needs of modern life, and that he must keep abreast of the times or give way to a better man.

Again, I say, I believe in inspection if it is carried out by capable inspectors. The fact remains, however, that because a man happens to be a professor in a college he is not necessarily qualified to inspect a secondary school. An inspector should have the backing of experience and a fair conception of the great modern institution. There are some who can well qualify and know what to look for; in those inspectors we have confidence.

I believe in the principle of inspection so firmly that I would extend it even to the inspection of the colleges by the high schools. The colleges inspect us to see whether our product is good enough for them to work with. Now let us inspect the colleges to see whether they are good enough to have the care and direction of our boys and girls. The colleges are already inspected by the colleges, but, judging from the reports that I have heard, the inspection does not cover the questions that concern us. For years this has been a burden on my mind, and it has been getting heavier and heavier as time goes on. It is undoubtedly the duty of the state to look after the welfare of its young workers in the colleges as well as to look after the welfare of its young workers in the factories.

The high-school men and women are the logical ones to make this inspection, as they are the ones who should have the information desired so that they can advise the young people more intelligently and to their advantage. It is to the high-school principal and to the high-school teacher that the pupil and parent turn when they wish to inquire about the proper college for the boy or girl. The principal or instructor knows the characteristics of the pupil and needs to know college conditions so that the advice he gives will be sound. Information covering the following points should be in the possession of every principal, and colleges should be accredited or non-accredited by the high schools according to the way in which they measure up to the demands of the high schools on these points:

- a) Social and moral atmosphere of the college and community
- b) Faculty advisers and supervision of Freshmen
- c) Teaching ability of Freshman instructors
- d) Numbers in Freshman classes
- e) The practice of farming out Freshman classes to students and graduate students
- f) Salary schedule of instructors and professors

Perhaps the most vital question to the parent in the selection of a college for his offspring is the social and moral atmosphere surrounding the institution in which the student is to spend his probably first prolonged period of absence from parental care and the closer supervision of the high school. It is the most critical period in the boy's life, and the environment may be such as to assist in the production of a man, a loafer, or a fool. Of course, much depends upon the character of the boy, and the college cannot be held wholly responsible. If conditions are such as to permit the young man to feel that it is the usual, if not the proper, thing to find his diversion in dissipation, gambling, and such kindred vices while he is a student in college or university, we should know that such things are permitted and advise our boys accordingly. If fraternities and sororities are so rampant that they demand the greater part of the Freshman's time and substance when he should be getting himself adjusted to the difficult situation in which he finds himself during his first year, parents should be so informed in order that they may act intelligently. If the social life of the college supplants educational interests, and if so-called fussing distracts so much from the more serious phases of college activities that it is a matter of public protest among the students themselves, it is time that attention be directed to such schools in order that conditions may be improved.

In many colleges and universities the student is left entirely to his own resources, but in the better institutions of higher learning there is a system of faculty advisers in operation. There may be some arguments against such a system, but the good will more than compensate for the trouble of organization if it is carried on by capable advisers. While it is unquestionably desirable that young men and women shall become self-reliant and cultivate the power of self-control, it certainly is not wise to cast them entirely loose from all supervision and advice in the most difficult year of their training. The college should lend a helping hand.

It is undoubtedly a matter of interest to the prospective Freshman and his parents to know something of the quality of teaching ability which is represented in the instructors to whose tender mercies the Freshmen are consigned: whether they have ever had any professional training other than courses in education, whether their work shows a real interest in the students, or whether they are simply making opportunities for themselves to do research work. Much complaint has arisen on this score.

Some reasonable limit should be set on the size of Freshman classes. I remember not long ago of visiting a Freshman class where I counted sixty-two boys and girls sitting at the feet of wisdom personified by a young man twenty-three or twenty-four years old. Of course we would not be allowed to do that in a high school.

The practice of some colleges in farming out their Freshman classes to graduate students is both unfair and cheap. For the sake of saving a few dollars on the salary of an underpaid instructor the work is turned over to graduate students who get the experience. There are other cases where the regular instructor directs the class and advanced students correct all manuscripts and examinations. The student who pays his money and gives his time expecting to get the benefit of high-class instruction gets a gold brick.

Just as the salaries paid to high-school teachers enter into the efficiency of the school, so do the salaries paid to instructors and professors in college measure in a way the general idea of the efficiency of the teachers and the policy of the institution. This should be a matter of information to the public. I have no doubt that such investigation would be the means of substantial increases in the salaries of many who are now working for less than the pay given to semi-skilled labor. Men and women who sacrifice their lives to such work are worthy at least of a living wage while they are waiting for one of those infrequent

opportunities for promotion. Neither the college nor its patrons can expect enthusiasm or efficiency when the problem of making ends meet is always foremost in the mind of the teacher.

These are some of the reasons why I should like to see the inspection of colleges by the high schools. If this organization gains the strength that is promised, no college will care even to balk at such suggestions as have been mentioned. Their welfare depends upon the boys and girls who go out from the secondary schools. Some college men say that they are ready for such an inspection and will welcome it, not only because it will show their own good condition, but because it will prove a benefit to others whose boards of trustees balk at needed changes and expenditures. Many of our best schools will undoubtedly measure up to the standards desired by the high-school men and women. The North Central Association has done some constructive work in this direction, but secondary school men have had little or no voice in setting the standards or making the inspection. I hope that the idea may prove worthy of your consideration and that some day this organization may take the necessary steps to make an investigation and, if advisable, make such an inspection.

These, ladies and gentlemen, are some of the reasons why your president feels that this organization has a large and useful field of activities and excellent reasons for your enthusiastic support:

- a) It will give us the proper basis for the development of a proper professional consciousness among all secondary school principals.
- b) It will become a clearing-house for the exchange of new ideas and experiments in administration, and a forum for the discussion of all educational questions that pertain to secondary schools.
- c) The consensus of opinion represented in the judgment of a national body of experts will give increased influence and power with our superior officers, with other educational organizations, and with the general public on all matters that relate to our schools.
- d) There will be the possibility of an organized inspection of colleges and universities by high-school men and women with respect to the welfare of the boys and girls who enter these schools for the purpose of intellectual, physical, social, and moral development.

There are undoubtedly many other things in your minds. If the Association makes it possible to accomplish any one of these things, it will be worth while. If we are successful in two of them, we shall have reason for enthusiasm. If we do more than that, we shall have a great organization whose influence will bring secondary education into its

own, and we shall have reason to be proud of being identified with it. My acquaintance with many of the men here present makes me feel sure that there is a great future before us and that this will become one of the strongest educational organizations in existence.

Principal Smith, of Thornton Township High School, Harvey, Illinois, presented the following resolution:

Resolved, That it is the sense of this Association that an important part of its constructive policy is the formulation of standards of high-school administration, and that the incoming President be instructed to appoint a committee of five to study this problem and report at the next annual meeting of the Association.

Principal Jesse B. Davis, of Central High School, Grand Rapids, Michigan, addressed the Association on vocational guidance.

ADMINISTRATION OF EDUCATIONAL AND VOCATIONAL GUIDANCE IN THE JUNIOR AND SENIOR HIGH SCHOOLS

JESSE B. DAVIS, A.M., PRINCIPAL, CENTRAL HIGH SCHOOL, GRAND RAPIDS, MICHIGAN

Educational and vocational guidance defined.—Educational guidance may be broadly interpreted as applying to all educational objectives toward which the school may be expected to guide the individual pupil. Confusion of ideas has arisen from the general misunderstanding of the term "vocational guidance," which is, in fact, a large factor in any plan of educational guidance. The history of the recent movement for vocational guidance in the public schools proves that all effective guidance in the choice and preparation for a vocation is largely a matter of education and experience. Applied to the pupil in the public schools, vocational guidance means the gradual unfolding of the pupil's better understanding of his own aptitudes and abilities, and an awakening of his own moral consciousness; it means the opening of his eyes to the broad fields of opportunity in the world; it means a selection of, and a preparation for, his own best field of service; it means a conception of himself as a social being in some future occupation, and from this viewpoint the appreciation of his duty and obligation toward his business associates, toward his neighbors, and toward the law. School men are

just beginning to realize the educational possibilities of capitalizing this life-career motive. The idea is now, however, being carried over from the stage of theory to that of practice, and is becoming one of the most significant factors in our efforts to place the school upon a plane of social efficiency.

The movement for educational guidance.—In 1899 President Harper prophesied the movement for educational guidance. "In order that the student may receive," he wrote, "the assistance so essential to his success, another step in the onward evolution [of education] will take place. The step will be the scientific study of the student himself. In the time that is coming there must be work performed either by the regular instructors or by those appointed especially for the purpose, to study in detail those to whom instruction is offered." After then outlining in detail the data which must be secured for each student, he continued: "The data thus gathered will determine the character of all advice given the student," and "the material will determine, likewise, in large measure the career of the student." "This [analysis and guidance] feature of the twentieth-century education will come to be regarded as of greatest importance, and fifty years hence will prevail as widely as it is now lacking"; and "its application will, in due time, introduce order and system into our educational work, where [with reference to the individual] now only chaos is to be found." Eleven years after this prophecy the First National Conference on Vocational Guidance was called in the city of Boston. At this meeting varied interests were represented: chambers of commerce, employers' associations, socialservice organizations, and the public schools. The need for a better adjustment between the boy and the job, between the man and his vocation, between the school and life, was the chief theme for discussion. The movement thus started resulted in the formation of the National Vocational Guidance Association, which was organized at Grand Rapids in 1913.

The need for vocational guidance.—Children are allowed to drift out of the public schools without any concerted effort to hold them beyond the legal age, or to assist them in making decisions which will necessarily affect their whole lives. Mere whims and petty influences often lead boys and girls out from the grammar school into "blind-alley jobs," or even into high-school curricula which are poorly adapted to their ability or needs. The large percentage of pupils dropping out of school with the completion of the grammar grades and the high percentages of failure in the early grades of the high school give evidence of the demand for more satisfactory cufriculum adjustments.

With the reorganization of secondary education and the tendency to broaden the program to meet the diversified needs of modern society. we are confronted with the very serious responsibility of guiding the individual pupil through a varied educational experience in order that he may have an opportunity for self-discovery. A new kind of childstudy is demanded which will be of assistance in advising boys and girls regarding the decisions which they must make from time to time. Sufficient information regarding vocations and opportunities for professional or industrial training must be available in guiding the pupil in planning a life-career. The overcrowding of professions, the lack of skilled workers in industry, and the demand for scientific methods applied to business are all demanding a better adjustment between the school and life. Any plan, therefore, for the administration of educational guidance should aim to guide the pupil through that training which will offer him the best possible opportunity to discover his own latent powers and abilities. It should aim to provide him with such instruction as will prepare him to enter that life-work which offers him his fullest opportunity for self-expression and service. Again, it should aim to give him the right start in life by closely relating the work of the public schools to the business interests of the locality, and by wisely placing him in occupational or professional life.

The general problem of administration.—Educational guidance is not a new idea, nor has it been entirely neglected. Teachers who have had the life-interests of their pupils at heart have always done more or less by way of guidance. While their intent was of the best, each one gave counsel according to his own experience and ideals. Teachers as a class have usually had a very narrow vocational experience, and their ideals have been characterized as academic and impractical. It is true that they have had little opportunity to know much about the industrial and commercial worlds into which a large proportion of their pupils may enter, yet these same teachers by virtue of their opportunities are most potent factors in molding a pupil's ideals and ambitions. The general problem demands a fund of information regarding vocations for the use of both teachers and pupils; it demands teachers of broader experience and vision; it demands a systematic plan of guidance throughout the school period; and it demands the efficient leadership of a director who knows the needs of the industrial and commercial fields and knows the possibilities of the educational system to adjust itself to those needs and to the needs of the individual child.

A survey of American cities.—A survey made by the writer in January, 1917, of all cities listed in the 1910 census as having over five thousand

inhabitants shows that approximately 22 per cent have adopted some organized form of vocational guidance. The larger cities of the country have been the first to feel its need and to respond to the demand. Of the cities of over one hundred thousand population, 44 per cent have established departments of vocational guidance under boards of education.

From the reports of cities which have such departments in operation it is evident that no uniform system of administration now exists. Nineteen cities have placed the work in charge of special officers or directors. In other cities the task is assumed by various officials, most of whom are already employed in other capacities. Superintendents, assistant superintendents, high-school or vocational-school principals, and teachers have been assigned to this responsibility according to local conditions or interests. A few cities have reorganized the school census and attendance departments by combining them with the work of vocational guidance and child welfare. These departments are variously known as the departments of child welfare, of educational research, or of vocational guidance.

When the movement for vocational guidance has received its support from organizations outside of the school authorities, the responsibility for the work is usually in the hands of a representative committee. Such a plan has been promoted in some cities by the local chamber of commerce, in others by the local women's clubs and other agencies. The chairman of the committee, who is often a teacher, acts as the volunteer director of the work, or in a few instances a trained director is employed by the committee.

Very few cities have appropriated special funds for the department of vocational guidance. Sums varying from five to twenty thousand dollars have been placed in the school budgets for this purpose. However, most of the financial support for this work is indirect, as teachers and other employees of the board of education are usually assigned to the various duties. The expense of establishing a system of vocational guidance in any city ought not to be large. The salary of a director in very large cities, and of such assistants as may be needed to handle the clerical work in his office, will cover the greater part of the amount necessary, as the remainder of the organization for guidance is a matter of rearrangement and adjustment of work already being done in the average school system. To correlate the work of the school census, the attendance officers, the labor-permit clerk, the school records, and the curriculum advisers in the schools; to establish a placement bureau

with its "follow-up" work; and to supervise the teaching of informational courses—these are problems of administration requiring some central authority for their management.

The survey of the smaller cities shows that a formally organized department is rarely considered necessary. While the ideas of placement and occupational guidance play a very large part in the work of the larger cities, smaller communities lay more stress upon informational courses such as that used in Middletown, Connecticut, upon guidance through English composition, and upon the work of curriculum advisers.

The director of vocational guidance.—The director of vocational or educational guidance, whether in the person of a superintendent or of a special officer of the board of education, must be a "man among men" in his community. He must be able to win the confidence of business men and employers as well as of teachers. One of the positive results of his activities should be the bringing together of the public schools and the business interests of his community. His office should become, not only a clearing-house for the placement of the product of the schools, but also a strong factor in assisting the schools to adjust the curriculum to meet the vocational needs of the community.

The function of the director of vocational guidance is to organize within his department all of those activities which have to do with the proper handling of the problem. He must know all that he can about the children of the community. Therefore he should have the school census and the attendance officers within his department, or in close co-operation with it. Through another division he should control the issuing of permits to work. He must secure through the schools a system of records which will give him the information necessary to advise wisely those who apply for permits or who come for vocational advice. He should have a system of following up the history of those who have been placed by the department in order that he may be of future service to them as a counselor. His office should be equipped with the necessary assistants to secure and classify vocational information, and to free him from clerical duties which would interfere with his larger usefulness.

Counseling.—Counseling is one of the most difficult as well as one of the most dangerous factors in the problem. Not only must the director himself be wise and sympathetic, but he must be most careful in his selection of others who are to be intrusted with this duty. When counselors have been chosen, they must be instructed and guided in the work in order that there may be uniformity of purpose and co-operation in working out a general plan. In some cities where departments are

organized the director has selected one teacher from each grammarschool building as a counselor. This teacher not only gives counsel to the pupils but is generally responsible for the promotion of vocational guidance in that building. The number of pupils to be handled in the junior and senior high school makes it necessary to have more than one counselor in a building. This problem can best be worked out in each locality according to its own plan of organization.

No uniformity in counseling is found in the various cities reporting. Some principals of high schools have divided the pupils up among the faculty, assigning from twenty-five to thirty to each teacher. The teacher keeps a record of attendance and acts as a curriculum adviser and moral counselor throughout the high-school period. With the introduction of vocational guidance this responsibility has been added to the other duties. This plan meets with the following difficulties: not all teachers are adapted to counseling; they are not familiar with college-entrance requirements and curriculum adjustments; they have not had opportunity to know the needs or requirements of industrial or commercial life; they may not be of the temperament or personality successfully to influence the decisions of their pupils. This plan also meets the difficulty that the teacher does not have sufficient time for proper counseling.

A few cities have overcome some of these difficulties by selecting the more capable teachers and assigning a larger number of pupils to each adviser. When this is done time should be allowed from classroom duties for counseling. The system of large session-rooms or "homerooms" which is prevalent in the state of Michigan adapts itself very effectively to the needs of educational guidance. The teacher in charge of these rooms acts in the capacity of an assistant principal, having full charge of such matters as attendance, minor discipline, scholarship. conferences with parents, social and moral welfare, and curriculum guidance. The fact that this teacher does practically no teaching, and that the room is used as the home- or study-room for pupils during their vacant periods, gives splendid opportunity for reaching all the pupils assigned to that room for personal interviews during the school day. In Detroit these rooms are called "houses"; those for boys are presided over by men and those for girls by women. Each house is named for some historic personage and has its own social life. Pupils on entering the school are assigned arbitrarily to these rooms so that each "house" is made up of pupils of all high-school grades. The plan tends toward democracy and adapts itself most admirably to educational guidance. The committee does not advocate any special plan for counseling. It is expected that each school system will adapt the principles involved to its own peculiar type of building and administration.

When principals and teachers have caught the spirit of the movement, all can join in helping to create an atmosphere of purpose and aim in all school activities. The vocational interests of the pupil can be aroused by addresses at the school assembly, by lectures and moving pictures, by trips to local industries and places of business, and by discussions in clubs and classes. Each subject in the curriculum has vocational applications, to which the teacher may direct the attention of the pupil, thus revealing some life-purpose which may become an incentive to a successful career.

Vocational direction in the junior high school.—The administration of vocational guidance is affected most favorably by the development of the junior high school. While some work may be done with pupils below the seventh grade by way of vocational guidance, there is every reason for beginning the formal effort with children of twelve to thirteen years of age, or at the seventh grade. The junior high school curriculum should be so arranged that the pupil will be given a variety of educational experiences, which will help him and his advisers in planning his future course of employment, of training, or of study. By this means it may be possible to discover special abilities and interests which will lead a certain group toward very definite vocations. On the other hand, this same process will serve to eliminate certain impossible lines of endeavor, which may save another group from future failures and disappointments. There will always be a large group of children of good average ability who show no special genius or weakness. If, however, the interest of this class has been held, and their ambitions aroused to continue their education and to make the best of their present opportunities, all that is immediately necessary will have been accomplished. These pupils will have more time in which to work out their own vocational problems.

No attempt is made in this discussion to fix the standards of the junior high school, but, whatever its future development may be, the curriculum should never be so widely differentiated that any individual who is discovered to be in the wrong course or curriculum cannot be transferred to some other line of work without serious loss of time or effort. In some junior high schools the pupil is made to vary his manual work until he finds the kind of work which he can do best. This same principle might well be applied to certain academic and commercial

branches. By this means an opportunity for self-discovery would be offered at an age when the foundation for educational and vocational guidance may be successfully laid.

In some states the compulsory-education laws are raising the age limit to fifteen and sixteen years, so that the great mass of pupils of average ability will be carried on through the junior high school period. It would be unwise to suggest that the junior high school program should be so planned that it would create a break between the ninth and tenth grades similar to the one which formerly existed between the eighth and ninth grades; and yet, as a large number of pupils are bound to leave school as soon as the law will permit, a certain rounding out of their education should be taken into consideration. This will mean that in the ninth grade certain subjects should be taught with this point in view, and that more definite vocational information and guidance should be given. And at the same time to spur their ambition these pupils should be given a more thorough understanding of the educational opportunities before them in the senior high school and college.

It is essential that it be made clear to all who attempt vocational guidance that taking pupils who are already in vocational schools or curricula and giving them information about the vocations open to the graduates of such special curriculums, or even placing them in good positions, is not all of educational or vocational guidance. Most of the guidance must take place before the pupil enters the vocational school or curriculum if he is to be given a proper opportunity to find his best lifework. The junior high school has the burden of responsibility in this problem. The danger is that too much stress be laid on the vocation and not enough on the study of the boy and the girl. Therefore, through curriculum guidance, through self-discovery in certain educational experiences, through informational courses, and through all possible means of child-study the junior high school must do all that it can to guide the individual pupil toward that future occupation, or future school work, which will lead him to the realization of his own ideal in the life-work upon which he enters.

Educational guidance in the senior high school.—Before entering the senior high school the individual pupil has been guided by a certain selective process toward one of the curricula offered for graduation. While we know that a very large proportion of those who enter the senior high school will not complete the work required for graduation, we assume

that the individual pupil ought to do so, and that it is best that this ideal be kept before the pupil. It is with this thought in mind that we prepare suggestive curricula to meet the needs of the various groups of pupils. However, the vocational choices of youth should always be understood as tentative, and opportunities for proper changes of curricula under guidance should be possible.

In the administration of educational guidance in the senior high school two important factors must be carefully considered. The first of these is counseling, or what, in this connection, might be termed curriculum advising. The plan outlined above under the discussion of counseling should be carried through the senior high school. The second factor is to provide a satisfactory incentive by way of reading, study, and discussion to arouse and keep active the life-career motive. It is not sufficient to offer a semester course in the study of vocations, or to conduct an intermittant or spasmodic effort to bring forward the study or choice of a vocation. Whatever plan is followed, it is essential that the work given should reach all of the pupils all of the time. It should follow the development of the pupil and should aim to aid him in making wise judgments as he is forced by his progress to make decisions step by step. Entering the junior high school, choosing the right curriculum or the elective subject, leaving school for work, selecting a job, entering a trade school, or entering the senior high school, again selecting a curriculum or elective subject, planning for business or profession, choosing a college, selecting a business or industry—all these and many more lines of action require that decisions be made. They are vitally important, and too little attention has been given them in the past. The pupil must be prepared to make these decisions wisely, and this is the most important function of educational guidance.

In the junior high school each subject taught lends itself to the problem of leading the pupil toward the right decision regarding either his occupation or his senior high school curriculum. But in the senior high school the problem increases in importance as it increases in difficulty. There is but one subject which reaches all of the pupils throughout the curriculum. This is English composition. Of all the high schools reporting a definite plan of instruction regarding the choice of a vocation, 75 per cent are applying the use of both oral and written composition to the problem. Combining the ideas of the leading schools in the country carrying on this work, the following suggested outline is offered:

OUTLINE OF A TYPICAL INFORMATIONAL COURSE IN VOCATIONAL GUIDANCE

A. The work to be done in the various grades in school

- I. Below the junior high school or seventh grade
 - Preparation for the elective courses and purposes of the junior high school
 - 2. Study of the child: environment, future possibilities, mental and physical abilities, etc.

II. The junior high school

- 1. Seventh grade
 - a) Ambition: through biography, geography, community civics, English composition, industrial trips, pictures, etc.
 - b) Self-discovery: through variety of educational experiences, academic, commercial, and industrial
 - c) Study of the child by special teachers for purposes of guidance
- 2. Eighth grade
 - a) The value of an education: through English composition, personal investigations and interviews, biography, directed reading, and community civics
 - b) Self-discovery and study of child continued as in seventh grade
- 3. Ninth grade: English composition
 - a) Elementary study of vocations
 - Vocations open to boys and girls without senior high school or further training
 - (2) Vocations demanding further training with a study of the senior high school opportunities
 - b) The elements of character that make for success
 - (1) Applying for a position
 - (2) A good employee
 - (3) Fundamental habits

III. The senior high school

- 1. Tenth grade: English composition, history
 - a) Advanced study of vocations
 - (1) Professions
 - (2) Technical vocations
 - (3) Vocations requiring special training
 - b) Vocational self-analysis
 - (1) An attempt to select a vocational field
 - (2) Preparation for special vocational field, college, or higher institution, etc.
- 2. Eleventh grade: English composition, sociology, economics
 - a) Vocational ethics
 - (1) Business and professional ethics
 - (2) Relation of employer and employee

- 3. Twelfth grade: English composition, sociology, economics, civics
 - a) Social ethics from viewpoint of chosen vocation
 - (1) Opportunity for social service through the chosen vocation
 - b) Civic ethics from viewpoint of chosen vocation
 - (1) Opportunity for service to city, state, or nation through chosen vocation

B. The life-career motive

- I. Applied to the curriculum
 - 1. By definitely outlined vocational curricula
 - 2. By curriculum advisers or home-room teachers

II. Applied to courses

- 1. English composition
- 2. History; through tracing history of vocations as research: or problem-work
- 3. Vocational application of science and mathematics
- 4. Latin for professional vocabularies, etc.

III. Applied to student activities

- 1. Commercial club
- 2. Agricultural club
- 3. Arts and crafts club
- 4. Camera club, etc.
- 5. Various groups of pupils interested in the same vocational aim
- IV. School assemblies, lectures, moving pictures, trips to local industries, etc.

C. Co-operating agencies

- I. Public and school library
- II. Parents' clubs
- III. Independent vocation bureaus
- IV. Y.M.C.A. and Y.W.C.A.
- V. Free employment agencies
- VI. Chambers of commerce, etc.
- VII. Manufacturing and business establishments

School Records.—That school records have proved to be very unsatisfactory estimates of the aptitudes or abilities of pupils has often been shown by later achievements of the pupils. A pupil's record should be of great value to the counselor or curriculum adviser in planning a future line of study or a future occupation, and it should bear the information demanded by the questionnaires sent out to school authorities when they have been given as references by an applicant for a position.

The record should be cumulative, beginning with the junior high school and continuing through the senior high school. It should include the usual scholarship record, something with regard to the pupil's mental and moral qualities, a complete account of his social and occupational experience, and when possible something of his special ability or talent. It should also show his home influence and environment.

Conclusion.—No part of this report has been devoted to a discussion of the possibilities of applied psychology to educational guidance. Much has been written upon this subject, but at present no definite plan can be advocated as a factor in administration.

As prophesied by President Harper, this modern movement calls for a new type of child-study. The data necessary for wise educational guidance must pertain to inheritance, environment, experience, and to physical, mental, and moral qualities, and should include any information which might throw light upon the problem. Not enough attention has yet been given to this phase of the question. Practical psychologists are at work, and we have reason to believe that they will soon contribute a feasible plan to be applied to the scheme of educational guidance.

With the reorganization of our secondary schools will come a more general adoption of a definite system for the administration of educational guidance. The various experiments now being carried on in different parts of the country will soon have proved their true value. Those that survive the experimental stage will contribute the material for a constructive plan of guidance that will permanently characterize the efficiency of the modern junior and senior high schools.

Mr. Newlon, of Lincoln, Nebraska, offered the following resolution:

Resolved, That a committee of not to exceed five be appointed by the President to report to this Association on Methods of Educational Guidance in Secondary Education.

On motion the session adjourned.

SECOND SESSION

Monday, February 26, 1917 THE FIRST ANNUAL BANQUET

At 6:30 P.M. over one hundred high-school principals met at dinner in the Banqueting Hall of the Coates House. Principal H. V. Church presided. Professor Charles Hughes Johnston, of The University of Illinois, was the first speaker. The subject of his address was "Class Consciousness among High-School Principals." Professor Johnston gave a scholarly address in his engaging manner. Professor Johnston has been a great favorite in the Middle West, and to many of the high-school principals he has been an inspiring counselor and guide. It is to be regretted that the manuscript of this address cannot be recovered from Professor Johnston's papers. He wrote the editor of this volume early in March that he would forward the manuscript in a short time. The many pressing details of his busy and useful life prevented his keeping his promise at that time, and his tragic and untimely death came before the editor was ready to go to press with this volume. It is with sincere regret that the loss of this manuscript must be recorded.

Professor Charles H. Judd, of the School of Education of the University of Chicago, spoke as follows:

THE HIGH-SCHOOL PRINCIPAL AS MANAGER

CHARLES H. JUDD, PH.D., LL.D., PROFESSOR OF EDUCATION, SCHOOL OF EDUCATION, UNIVERSITY OF CHICAGO

The ordinary conception of the duties of the high-school principal comes from a period when the chief business of the principal was to teach classes. Indeed in a great many high schools of the country even at the present time a large part of the principal's energy is used in giving instruction to students. When a school grows large enough to demand special attention to its business needs the principal is gradually withdrawn from the classroom and finds himself increasingly engrossed in supervising supplies, straightening out relations between the school and parents, and adjusting all sorts of petty matters of daily routine.

The superintendent of schools is an administrative officer who has been produced in much the same fashion. He is usually thought of as chiefly responsible for the elementary school. He also, like the principal, has gradually left the teaching profession to become a business officer of the school system.

Both the principal and superintendent were appointed to the positions which they now hold because of their seniority in office or because of their superior qualities as teachers. So gradually has the evolution to which we have referred gone forward that there has been very little consideration in educational literature of the special duties of these

administrative officers. Even the superintendent has been neglected as compared with the classroom teacher. There have been plenty of books written on methods of teaching, showing in the greatest detail how classes ought to be managed and how every subject in the curriculum should be approached. But there has been practically nothing written about the management of school supplies, about methods of dealing with the patrons of the school, and about methods of supervising teachers. Even such details as the making of a daily program and the preparation of an annual report have been left entirely to individual invention.

We shall find a more illuminating introduction to our discussion if we turn to a consideration of present-day business organization. The department store has come to recognize as a necessary factor in its organization a man whose duty is in no sense of the word that of a superior clerk or bookkeeper. The department store has a manager. His duties are those of overhead control. He is the central officer in the establishment. Without reference to his past as a clerk or bookkeeper he is now an authority with the power to determine the policies of the whole institution and to supervise and direct the activities of all the subordinate members of the establishment.

What is true in the department store is true of every large business concern. The factory has developed a whole series of managerial positions and has defined them as positions of large influence and importance to the success of the concern. They represent the necessity of a centralizing and controlling power; they result from the larger growth of industry and from the use of more powerful instruments of production and distribution. So long as production was on a small scale its results could be handled readily by the person who was also responsible for the production itself. As soon as production grew to the proportions which it has reached in modern industry the factors of transportation and distribution, the problems of assembling capital and planning for the activities of the business, became distinct and separate from the processes of production.

We shall ultimately come to a similar recognition of the manager in education. It will always be of essential importance to the life of a school that there be teachers. The class exercises must go forward in such a way as to impart well-arranged experiences to the pupils. It is no disparagement to the teacher's task to recognize, however, that the modern school has long since outgrown the classroom. The individual teacher does not represent the school as a whole. Very commonly the individual teacher has little grasp of the larger problems which the

school as a whole must face. To take such a teacher out of the classroom and to assume that without further training he or she is prepared to cope with the problems that must be solved in the conduct of a modern school is to neglect the experience of business, which has discovered the necessity of a separate managerial class with a special training for larger centralized duties.

One recognizes the danger of intrusting the conduct of a school to a person who has never outgrown the teacher's view. The moment one goes into a school which is governed from the narrow point of view of a specialist certain characteristics are patent. Here is a teacher, for example, who has been promoted to the principalship from the position of Latin teacher. One finds that the program of studies in that school is so arranged as to give Latin preference. Students are made to feel that their education is incomplete and of an inferior type if they do not pursue the subject which the principal used to teach. The selection of teachers and of subordinate administrative officers reflects a lingering preference for the Latin type of mind. When one finds such conditions as these they show that the principal has been dwarfed by his contact with a special subject and that he does not recognize his central position. The school which he controls is sure to reflect the narrowing influence of his specialization in its limited conception of an education and of the opportunities which education offers.

It would not be fair to use the single example of a Latin teacher. The case is quite as bad when a physics teacher is promoted to the principalship and continues to move in the narrow orbit of the physical sciences. Such a physics teacher is likely to be very radical and to be boastfully proud of the innovations which he introduces. Intolerant of his ancient rivals among the literary subjects he takes delight in introducing into the curriculum only those subjects which he is pleased to term practical. He is often more violent in his prejudices than the retired Latin teacher, and his contribution to education is correspondingly narrow.

In both cases the superannuated teacher who gets into the principalship fails to see that there are new problems for him to study which never rested on his shoulders when he was a classroom teacher. The faculty meeting which he convenes has no broader significance to him now than it had when he was a teacher. The result is that he has nothing to suggest to his faculty except the discussion of individual pupils and other petty matters which have to do directly with the routine of classroom work. If he is in any wise distracted from these narrow and special lines of thinking it is because the urgent clerical routine of his office calls upon him to find out something about the way in which student records have to be kept for the purpose of preparing college certificates, and because the demands for supplies have to be forwarded by making out requisitions and pushing them through.

The time will come when all this will be different. Men and women will be selected for principalships not because of their seniority and not because they have been superior teachers in some special line. They will be selected because they are equipped by natural capacities and by careful scientific study for administrative and managerial functions. Breadth of view and insight into the larger educational problems will be at a premium, and there will grow up in the hands of this managing class a stimulating type of educational literature which is now entirely lacking.

I confess that it has always been a surprise to me to find how little high-school principals write about their experiences and how little they show inventiveness in carrying out educational studies. Sometimes when I have an opportunity of discussing the matter with them personally they tell me that they are absorbed in office work, but any systematic canvass of the actual doings of a high-school principal for twenty-four hours will make it clear that there is infinite possibility of readjustment and economy.

It is possible for any high-school principal, if he turns himself to the task, to find the opportunity for investigation and he will be surprised at the large advantage in his ordinary work which will come from the results which he secures. May I venture to suggest two or three lines along which scientific work of this type might develop?

In the first place, no high-school principal can afford for a moment to neglect the problem of the institutional relationships of the high school to the elementary school below and the college above. One often hears elementary-school officers complain about the high school as intolerant and as narrow in its demands. The same kind of complaint issues from the high school against the college and its requirements. From a large social point of view it is inexcusably stupid for anyone merely to object to what is going on. Let us assume for the moment that the worst possible conditions exist. Let us assume that college-entrance requirements are as bad as they can be and that all teachers in elementary schools are quite stupid. How are these difficulties to be overcome? By a withdrawal of the high-school principal and his competent staff into the exclusive confines of their own establishments? Can the high-school principal, by refusing to have anything to do with

the offending institutions above and below him, really satisfy himself that he has performed his duty either as an educator or as a manager of the high school? Suppose, for example, that the manager of a department store should tell us that the factory from which he draws his supplies is absolutely bad and incompetent, and the customers to whom he distributes his goods are a worthless lot. Would we think of him as intelligent about his own immediate relationship to the factory on the one hand and the customers on the other?

High-school men very frequently complain that their hands are tied because of the central position which they occupy in the school system. They cannot impose requirements on the schools below them and they cannot control what is above. One would think that they would see the fallacy of their own statements. They occupy, as a matter of fact, the strategic position in the educational system. If they would study carefully the needs of this system and the influence which they can exercise from their central position, they could create an entirely new type of educational discussion. The fact is that the colleges do not today dictate entrance requirements. The colleges, like all other public institutions, are obliged to deal with the social situation as it is. When some group of intelligent men and women make this social situation a subject of discriminating scientific study, they will be in a position to exercise enormous influence in shaping the development of the whole educational scheme. No one has a more promising opportunity for this sort of work than the high-school principal.

Again, if the high-school principals of this country would grasp the significance of the changes that are going on at the present time in the organization of the grades just below the first year of the high school and in the course of study of the first two years of the high school, they could put themselves in a position to contribute largely to a historical movement which will undoubtedly go down in the records as one of the most important achievements of American school organization.

A second set of problems no less significant than those of the relationship of the high school to other institutions relates to the curriculum of the high school itself. In the rush of development of the last twenty-five years the high-school curriculum has been expanded and diversified to a degree never paralleled in the history of education. The centrifugal forces which have been at work carrying the curriculum into every possible line of activity must ultimately be controlled by some central attraction which will save the curriculum from disintegrating into a collection of separate atoms.

There is a principle of concentration in education as well as a principle of diversification. There is only one reasonable hope for a clear formulation and expression of the principle of concentration in the high-school curriculum. It is through an intelligent central management of the whole institution by the principal.

There was in earlier times a narrow type of centralization supplied by the required curriculum and the relatively simple professional demand which controlled the choice of subjects offered in the high school. At that time the high school served the few and served them with definite reference to well-recognized purposes in life. The narrow formula of a required course is no longer a social possibility. The high school today is the servant of everyone and it must meet demands as wide as society itself. Someone must make himself responsible for a study of these larger demands and for the creation of a scheme of instruction which will meet in a large way these demands.

Thus far we have confined ourselves to the discussion of two broad problems of school management. The relation of the high school to other institutions and the organization of the curriculum are comprehensive enough to engage the best talents of a managerial class. But while these broad problems are being studied and solved there are direct personal duties of a managerial type which the high-school principal has no right to overlook. Teachers must be supervised in a fashion which is at once direct and scientific. There is at the present time diversity of practice on the part of high-school principals with regard to the supervision of teachers. Some principals adopt what is known as the college attitude. That is, they assume that each high-school teacher is a specialist competent to conduct the affairs of his department without interference. The high-school principal who accepts this view is likely to regard himself as entirely exempt from the duty of visiting classes. On the other hand, there is the high-school principal who imposes on the teachers his own views about how every subject in the curriculum should be handled. He not only visits classes, but assumes that he knows all about everything. He speaks in a large and authoritative way about the teaching of each of the subjects. To him the high-school faculty is nothing but a group of subordinates molded into an educational organization through conformity to the methods that he himself would adopt provided he were not so busily engaged attending to the manifold duties that prevent him from taking personal charge of every activity of the school,

Both the non-supervising attitude and the attitude of excessive supervision ought to be replaced by scientific methods of determining whether classroom work is efficient or not. No principal has a right to allow the class exercises in any department to drift along without the severest tests of their efficiency and competence. The tests must, however, be of an impersonal type. They must be such as to convince both the teacher and the school board that work has been carried on satisfactorily and that the results have been accurately evaluated. This in turn does not mean that the principal's personal estimate is to be accepted. The efficient manager must know how to submit his own results to scientific measurements. I look forward to the time when high-school principals will prepare, at least once a year, such reports on the achievements of their own schools as will make it clear that they know exactly what is being accomplished in each class and are prepared to evaluate these results in a clear, impersonal statement.

Similar impersonal, scientific supervision of students may legitimately be demanded of the principal who understands his task. There is one type of principal who never comes in contact with the students. He is remote and austere. There is the other type of principal who is constantly with his students and is enthusiastic about the help he can give them in personal conferences. Sometimes the principal is entirely mistaken about the benefits which he bestows upon the student body. His remoteness may be very far from an expression of the dignity which he assumes that he is exhibiting. His familiarity and advice, on the other hand, may issue in a shallow popularity which does not work to the advantage either of the school or of the individual students. The study of student accomplishments and achievements after the students leave school is an important part of the measurement of a principal's work. The attitude on the part of the students that they are being dealt with in an impartial and just way ought to be cultivated by so clear a statement of the demands of the school that there shall be no ambiguity in the social relations which are involved.

It is, however, unnecessary to enumerate further the kinds of managerial problems which arise in the organization of every high school. The main purpose of these comments is to bring out the major fact that there has arisen in our educational institutions a new kind of opportunity. It is not the teaching opportunity; it is the opportunity of the manager. It is a broader opportunity than that of the classroom teacher. It involves a new type of training and a new technique. It involves an intelligent grasp of a broad situation. Such a grasp of the principal's duty will ultimately express itself in a type of productivity which highschool principals of this country have not up to this time exhibited.

The members of this organization are to be congratulated on their recognition of these new problems and on the formation of an association whose function it is to work out some of these problems. As soon as one high-school principal recognizes the possibilities of the scientific treatment of his problems he will of necessity stimulate to similar studies all those who are intimately associated with him. We may look forward to the development through this Association of a type of material which will illustrate the result of co-operative effort to improve the management of high schools. I believe that no more promising step has been taken in educational organization in recent years than the formation of a national association for the study of the problems of high-school administration.

Professor David Snedden, Teachers College, Columbia University, followed with his address, "The High-School Principal's Place in Reorganizing Objectives of High-School Education."

THE HIGH-SCHOOL PRINCIPAL'S PLACE IN REORGANIZING OBJECTIVES OF HIGH-SCHOOL EDUCATION

DAVID SNEDDEN, PROFESSOR OF EDUCATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK CITY

The American high school, including the junior high school, which is becoming a part of our recognized system of secondary education, now takes a larger proportion of our young people than any other similar agency in other countries. While all our pupils must be expected to attend school during the junior high school period, only those of greatest mental ability and most favorable surroundings are likely to attend the general high school for any considerable length of time, although the proportion of these will steadily increase. The opportunities for secondary education must therefore be considered largely from the standpoint of that class of young people from which are likely to come our leaders in all lines of civic, cultural, and vocational enterprises.

The defects of the theory of high-school education at the present time are chiefly of historical origin. The high school is still to a large extent pack-horse transportation found in an age of steam. The social needs of our time for a more effective education of our young people from twelve to eighteen years of age is very great, but the high school has comparatively little of a definite and specific order to be based upon

a conscious analysis of the needs of a democratic society, under exacting economic conditions, trying to produce the maximum of results for twentieth-century citizens. As a basis for discussion the following are submitted as definite recommendations of theory upon which such readjustment of practice must be based:

I. Our system of secondary education must clearly differentiate between vocational purposes on the one hand and purposes of cultural, civic, and liberal education on the other. This differentiation must be made for the fundamental reason that the economic and vocational life of our time looks toward specialization and differentiation, whereas our cultural and civic education, as well as such provision as we make for physical development, must look largely toward the unification of our people, the development of common standards of appreciation, tastes, ideals, etc.

So far as the junior high school is concerned, it should not occupy itself at all with vocational education. There is no evidence as yet that suitable vocational training can be begun before fourteen or even fifteen years of age. Consequently the field of effort for the junior high school is to be found wholly in a right *general* education, under which are to be included such various classes of objectives as are properly to be described by the words cultural, civic, and physical.

For pupils from fourteen to eighteen years of age, during which time a very large amount of detachment from the general school for purposes of preparation for, or entry upon, vocations may be expected to take place, the general high school should reserve to itself only functions of general education and should make no attempt to enter into the field of vocational education. From this point of view it may be expected that so-called commercial courses in high schools, household arts, home economics, and agriculture, as presented with any vocational objectives in mind, as well as technical high schools and the hybrid known as the cosmopolitan high school, will all undergo fundamental reorganization just as soon as effective objectives of vocational education have become clearly differentiated. In other words, as soon as our theory shall have cleared up in this respect we shall perceive that the general high school for the brighter and abler young persons who can prolong school attendance has a very large and important function in the field of general or liberal education (including thereunder specialized objectives of cultural, civic, and physical education), and in this respect is analogous to the liberal-arts colleges, which have no connections at all with vocational education. On the other hand, society needs in almost endless variety specialized vocational schools wherein may be obtained in definite and forthright fashion preparation for the literally hundreds of vocations into which our boys and girls may be expected eventually to go, and for which non-school agencies of vocational training are at the present time ineffective and are diminishing rather than improving in power to do this important work.

- 2. Within the schools of general education (junior high school and senior high school) a sharp differentiation must be made between those objectives in physical, civic, and cultural education that have a demonstrably definite relationship to the requirements of later adult life, and all those other objectives which are to be described chiefly as contributing to the unfoldment or development of the pupil's own native powers. At the one extreme we may place play, miscellaneous reading, movingpicture visiting, and Boy Scout activities as typical of developmental phases of secondary work, while at the other we may place the learning of mathematics, foreign languages, and the necessary facts of history at certain points as being typical of knowledge that ought to be organized definitely toward adult needs. Failure to make the discriminations here suggested accounts at the present time, on the one hand, for our strenuous efforts to teach certain subjects, such as algebra to girls, Latin to boys, and ancient history to both, without any conscious knowledge of a probable functioning of these types of hard learning. On the other hand, we recognize that in the high school itself a large number of developmental activities have crept in more or less surreptitiously, but their value is not yet recognized from the standpoint of the total theory of values for secondary education. The differentiation here suggested ought to have an important bearing on the problem of electives. From it we should get light on the matter as to how far the truly cultural education of high schools should consist in the extension and elaboration of fundamental native interests in special forms of art, literature, science, and their resulting avocational activities. On the other hand, we should be able to differentiate those fundamentals, either in civic capacity, cultural knowledge, or physical power, as to what uniform attainments should be imposed (as, for example, contemporary discussions as to prescribed physical training in high schools).
- 3. It will be necessary as preliminary to the reorganization here suggested that we abandon, as one of our larger objectives as now held, the so-called theory of formal discipline. We must reconstruct a more effective theory of mental training, but we must give up the notion that there exists any educational "simple" which is better than anything

else for mental training. We must procure mental training primarily as a by-product of the pursuit of intellectual activities, the concrete or so-called "content" ends of which are themselves demonstrably worth while, whether these be classified under the general-growth head or under the training preparatory for adult life.

- 4. We must be prepared to take up high-school subjects one by one and work out in each case a demonstrable connection between the ends of the subjects as now held, or as perhaps capable of being restated, and the needs of society from the individual and of the individual in society. Furthermore we must be prepared, where we discover needs on the part of the individual in society or of society as served by the individual which are not now met by existing subjects, of organizing new subjects to this end. This is of peculiarly great importance at the present time in the fields of physical and civic education. We need genuine constructive work for junior and senior high schools at the present time along such lines as community civics, general secondary vocational guidance, art appreciation, etc.
- 5. It is the writer's conviction that, as the process of reorganization of secondary education proceeds, the following will be among the most important changes undertaken in the traditional subjects:
- a) Most of the mathematics as now taught will be placed upon a strictly prevocational basis, to be recommended only to those who expect to follow mathematics-using vocations hereafter.
- b) The various practical-arts subjects (manual training, household arts, commercial education, gardening, and agriculture), so far as they are obtained in the junior and senior general schools, will be reorganized so as to make definite contributions to liberal education, and their vocational outcomes will be regarded as negligible, although considerable results for vocational guidance may be expected.
- c) Modern foreign languages will be offered, but no student will be encouraged to take up a modern language unless he can give large promise that he will pursue it to the point of some definite mastery yet to be defined. It will probably be regarded as beyond the capacity of any high school of moderate size to offer more than one modern language, and it will probably also be thought preposterous for any pupil other than one of extraordinary ability to ask for more than one modern language during his secondary school career.
- d) English literature will be carefully differentiated from Englishlanguage studies, and the tendency will be to use more and more

literature which is contemporaneous or recent, and which is capable

in a general fashion of interpreting life for adolescents.

e) Secondary study will be carefully differentiated into two kinds: an intensive kind, which, like mathematics, will be taken chiefly from the prevocational point of view, and another, yet to be developed, which will be expected to terminate chiefly in the broader appreciations and insights that are characteristic of the man of cultivated powers as regards scientific knowledge.

f) History will be merged into the broader subject of social science, and its materials will be reorganized in such a way that the chronological order shall largely disappear, and the results of history study shall become visibly functional in the better social ideals, social insight, and

social attitude that characterize the good citizen.

g) English-language studies will more definitely than is now the case seek to improve speaking and writing capacity, as those are practically required by citizens living under modern conditions.

THIRD SESSION

At 10:00 A.M. on Tuesday, February 27, in the Banqueting Hall of the Coates House, the third session of the first annual meeting was held. Principal B. F. Buck, of the Nicholas Senn High School, Chicago, read his address.

RELATIONS BETWEEN HIGH SCHOOLS AND UNIVERSITIES

B. F. BUCK, PRINCIPAL, NICHOLAS SENN HIGH SCHOOL, CHICAGO, ILLINOIS

After listening to the excellent address given by your President on the outline of work which this Association may do, and after such addresses as were given at our banquet last evening, I feel somewhat embarrassed in presenting what I have to say today. I wish to emphasize, by way of illustration and application largely, one phase of the relationship which, it seems to me, should exist between the high school and the university, and to draw some conclusions.

Society is made up of many different human elements. The basic principle in all judgment of the efficiency of citizens is whether they contribute their due share to the maintenance and welfare of the community. So any organization in a community must defend its right to existence upon whether or not it contributes to the common good of the whole. This is especially true of those institutions to whose care

and guidance we are willing to intrust the welfare of our sons and daughters during their most impressionable years. Elementary school, high school, and college serve as the great humanizing, socializing, and spiritualizing forces in our country, and any discussion concerning relations between these schools should be based on this fact. They are all intrinsically phases of the same educational process and look toward complete fruition in efficient human beings.

Now the modern secondary schools and colleges are essentially and primarily complex social organizations. One needs only to analyze their various activities, which make a strong appeal to the student body, to be convinced of the fact that the essential value of these institutions is not so much in accumulating facts of history, mathematics, or science as in the opportunity they give for the interplay of social instincts and emotions in the intercourse between one human being and another. All courses of study, all the teaching corps, all administrative adjuncts, all activities, including the class work, athletics, dramatics, or whatever is found in the best schools and colleges, are only instruments in developing the individual into a positive integral part of the greater social organism of the world at large.

The motives for such activities, manifested in these group relations in the schools, are the same motives too which inspire worthy living in the larger world of society. It is a generally accepted opinion, whether true or false, that the efficient management of athletics goes a long way toward giving an institution its reputation in the minds of both the student body and the general public. It is not generally accepted, but none the less true, that the efficient management of athletics goes a longer way toward the development of "squareness" in life, the cultivation of obedience to regulations, and the learning to be a modest winner and a cheerful loser, which, as Richard Cabot has well said, "constitute the essence of self-government and spiritual growth." So also the dramatic and debating clubs furnish opportunities for the student to measure up with his peers under equal conditions and to bring into active use those latent talents which are in this way so much more successfully brought into play than in the routine of the average classroom.

It is not difficult for anyone to realize the power of co-operation in any of these so-called "extraneous" features of the school upon the character, scholarship, and *esprit de corps* of the students involved. Yet it is not so apparent that this same co-operation should be the inspiring force in every classroom as well. Too little use is made of this motive in our schools, and the teacher whose class is characterized

by the spontaneous acts of its members stands out boldly in the school horizon. And fortunate is that school or college whose administrative officers recognize the value of this in its influence on character-building and are wise and skilful enough to utilize it to the best advantage in the organization and management of their institutions.

As a concrete example of the value to an organization as a whole of the co-operation of its various individuals with one another, and of the combinations of the efforts of its various groups, I would cite the work done at Christmas time in our high school. All members of the school, teachers and students alike, pool their efforts to assist some worthy families and individuals. All minor groups of the schools also are imbued with the spirit of co-operation in vying with one another in lending a helping hand to less fortunate human beings, till the whole school is a veritable hive of workers in which each contributes his part to the general welfare. Food, clothing, fuel, and money are brought together and distributed (from the school) where they will be of most help to the needy. The influence of this work in many instances extends over months, with the result that families are supplied with necessities of life by special groups of individuals of the school for as long as a year, or until such time as the head of the family can find sufficient means to provide for those under his care. The spirit is contagious, and parents, becoming interested in the work, assist the school in its work. From the Senn High School alone last Christmas there was distributed over two thousand dollars worth of good cheer. The special value of all this to the school, besides giving the students a practical illustration of the pleasure of helping a needy brother, and creating in the students a broader sympathy for their fellow-men, is the worth of co-operation in the larger community life and the tremendous power obtained by the cumulation of efforts of so many different individuals at one time on one particular work. Instead of detracting from the efficiency of the regular work of the school, students and teachers alike acquire added interest in their daily duties by getting a more wholesome attitude toward life as a whole and a deeper appreciation of the fact that what they do helps to fit them to be more serviceable in their community. This is not charity simply, as it is usually considered, but is as far as possible a means of helping people to help themselves.

To apply this principle more directly to the academic work we recently conducted a Shakespeare memorial celebration throughout a week, ending in a great pageant which represented the work of at least a thousand of our students. This work was carried on by the whole

school under the direction of the teachers of English and involved more or less all of the 2,410 students. For the time being Shakespeare was on the mind of everyone, and plays and readings from Shakespeare tended to create a stronger interest in the great author and a desire to learn more of his works. This too had its effect in cementing the individuals of the school closer together in their communal life and in establishing a common ideal, a bond of union, to which we might appeal as the "spirit of the school" when other matters might arise which pertained to the management of the whole organization. Appeals to pride in the institution and its achievements, to respect for its standing in the community, and to a strong desire to be one of such a group have tided us over many difficult administrative periods. In other words, what characterizes community life in its varied forms has been used to advantage: the emotions have been recognized as an important factor in school administration. They should be more adequately utilized in every field of education. Johns Hopkins has already made some progress in this direction by experimenting with infants, but any institution would make a distinct contribution to educational philosophy which would establish a department for the study of the value of instincts and emotions in the development of boys and girls into manhood and womanhood. Writers on educational subjects have spent most of their time in discussing subjects and methods pertaining more immediately to the growth and development of small children. It remains for someone to demonstrate fully how the emotions can be made of most service in the fields of secondary and higher education.

And so, not only this spirit of the institution as evinced in its activities and communal classroom work, but also the subjects studied, must both co-operate and co-ordinate to the upbuilding of the character of the boy and girl. I recall quite vividly the cool reception accorded the speaker a little over a decade ago when he suggested at an National Education Association meeting the introduction into the secondary school and college of more courses in commerce, agriculture, and household economy, or any other subjects which bear more intimate relation to the community at large; today they have their place in all the more advanced institutions; and Dr. Snedden has recently pointed out in a valuable address the prospects for the next twenty-five years. The needs of the community in this particular are being recognized by educators, and there are being introduced subjects which have more of the "social content." There is evidence of the steadily growing desire to break with the past and to put less faith in subjects which bear the earmarks

of tradition as their only just cause for existence. Heretofore the relationships between the great facts of life, as revealed in the fields of art, literature, commerce, and industry, have not been unveiled to the young man approaching maturity. In his thoughts the real meaning of these as a spiritual unit has had no influence. Yet by this I do not underestimate the importance of close and steady application to any definite line of work in the formation of right habits, nor would I underestimate the value of thoroughgoing scholarship. I am not an advocate of the so-called moving-picture theory of education. But I do wish to emphasize the fact that the motive underlying all our work should be the same motive which impels to active service in the social group.

But the proper utilization for character-building and habit-formation of the group activities in the school, the school spirit, and choice of subject-matter are not the only agents at work. Foremost of all forces is the adviser or teacher. It is not necessary to point out the essential qualifications of a successful teacher; they are known to all. But there is one characteristic of the great teacher or administrator which is frequently not sufficiently emphasized. The big soul which feels for and sympathizes with the successes and frailties of the boy and girl, which reaches out a guiding and helping hand, which opens up the vistas of the future and connects them with the past, the soul whose touch is an inspiration—the true relationship of such individuals to the school organization is too frequently overshadowed by details of much less importance. And yet it is well known that the influence of such men is really the richest gift that school or college life can offer. Standards of conduct, habits, and desires have all been molded by such personalities. These are the men who should be the educational advisers, the teachers. or the vocational guides in our schools. In fact, there is not room for any other kind; for human instincts are not confined by brick and mortar, and conduct is often guided far more by emotion than by reason.

It may be said that such teachers are rare. No doubt this is true. But wherever they are, they should be available to the student body, and the organization should be so administered that their services will be utilized where they will give the most help to the greatest number. All of us, either by chance or by personal choice, have been brought into close contact with such men and know something of what they have meant to the institutions with which they have been connected. In my elementary-school life one man stands out prominently in my memory as illustrating the power of decision. To him and to my father I am indebted more than to all other individuals for what I possess in ability

of execution. In my high- and normal-school life not more than two can claim distinction in my memory as having any essential influence in forming my character. In my college life President Angell left an indelible impression on my mind because of his broad sympathy and sincere friendship; a teacher of Latin, because of his being a broadminded, wholesouled man thoroughly sensitive to the frailties of youth: a teacher of Greek, because to him I owe whatever ability I possess as a teacher, and because he, more than any other one man, taught me the efficacy of a clearly defined statement, and the value of good cheer and good physique as assets in daily life; and Dr. John Dewey, because of his ability in making clear the philosophy of conduct. The place occupied by President Angell and Dr. Dewey in the minds and hearts of the university public is a part of their fame, but the teacher of Greek whom I have just mentioned, Professor Pattengill, who came into close contact with the student body as faculty adviser of athletics during many years, exercised an influence more potent than that of all the other members of the faculty combined, with the possible exception of the President. A dominant, forceful personality, wherever you meet it, is a definite spiritualizing force and therefore deeply socializing.

But it may be asked what bearing on the subject in hand has the fact that the school or college is largely a social organization consisting of many small groups guided by such personalities as these? How does this affect the relationship between the secondary school and the university? My answer is that it comprehends the whole question. It may appear that the subject might then have better been phrased as the similarities of high schools and colleges. It is indeed on this basis that I plead for a better understanding among ourselves, as administrators, of our problem, namely, the adjustment of boys and girls to their environment and their development into good and useful citizens of the community. I would plead also for a better interpretation and application of the means at our disposal for accomplishing this end. I would ask too for a wider sympathy for young people in both high school and university, and for a clearer vision, a unity of purpose, and a more harmonious action as we give and seek advice and urge legislation in our various educational meetings.

To be more specific, of what essential importance is it whether ability to cope with the problems of daily life, noble ideals of manhood or womanhood, strength of mind and character have been acquired through the medium of Latin, agriculture, science, or literature? History affords many instances of cultured men who have had access to no one

of these means of education in the schools and yet may be considered truly well educated. Must a boy spend four years of his life in a vain endeavor to master subjects preparatory to entrance upon a new phase of his social existence which differs from the previous phase only in name? Or is it essential or wise that he be required to waste his energy and time in pursuing studies which have not any vital connection with his life and thought (or worse than that, which tolerate or cultivate habits of failure), in order to cover the subject prescribed to enter the university? Every one of us has known in our experience boys who have failed so repeatedly, because they have never had placed before them the proper motive for activity, that their very instincts and talents have become atrophied.

These are only a few of the topics which have engrossed our attention for several years. During the larger part of this time the main point at issue has been ignored or entirely forgotten. Whenever we shall have found and applied some real, legitimate motive for mental and moral activity which shall be effective in developing citizens appreciative of their rights and duties as individuals in a social group we shall have made much progress toward eliminating bickerings about standards, units, and requirements for entrance upon what in reality is only a new environment. In other words, when we come to a full recognition and realization of the social importance of the individual in the organization, it will be comparatively immaterial what standards are set up or what requirements are laid down.

I am also firmly of the opinion that it is about time that each community decide for itself what kind of high school it is willing to support and what kinds of curricula are most suited to its needs. I am loath to say that such associations as the North Central, the Association of New England Colleges and Secondary Schools, and other similar organizations have not done great service to the secondary schools of the country. They have been of much assistance in clarifying the scholarship phase of education. But it cannot be denied that the secondary school has been between the upper and lower millstones for many years, and that it is in danger of losing its power of performing its proper function in the scheme of education, and its identity as the people's college. I am hoping for the time when the educational experts will so understand one another and rely upon one another's motives that the student may step from one phase to another in his educational advancement with the assurance that he will not be hindered from time to time by some obstructive hurdles set up without rhyme or reason. In other words,

any graduate of any school should be permitted to enter the next higher institution without so much ado as to whether he has done successfully so much Latin or so much mathematics, or so much of this or that, and should there find subjects and atmosphere suited to his growth and development.

I am anxious for the time to come, also, when the personal opinion of the teacher or the administrator of the school which the boy or girl has attended shall receive its true value in determining the student's future status. In secondary schools today, no matter what their enrolment, the best criteria for judging the students' prospects of future success are, not the results of any examination, but the knowledge of their motives and abilities possessed by the teachers and principals. This personal contact of the teacher with the student gives a far deeper insight into character and chances for growth than any number of grade marks. Why not make use of it? For many years it has been my practice to devote at least three-fourths of my time and attention as principal of a large high school to the care and guidance of the entering class, with the belief that the first year is the most critical period of school life. Would it be preposterous to promote many a youth in both high school and college on the basis of this insight, irrespective of whether he made a grade of a few points above or below the passing mark of the school? Our certificate blank should offer ample opportunity for the expression of definite opinion of such administrative officers, which would have influence in determining the boy's position in a new environment. While it would be extremely undesirable to give information which would be detrimental to the future of the boy, it is often possible for a sympathetic adviser or teacher, such as I have mentioned, from a knowledge of the boy's past, to make use of such information to his great advantage in his new life. Certain eastern institutions are making progress in this direction when they, in some cases, give more value to the personal opinion of the administrative officer of the school than to the examination for entrance.

But this social principle on which promotion should be based may easily be vitiated by the student's reception in the higher institution. I have often wondered if it would not be profitable and feasible for the secondary school to be informed of the nature of the environment into which its product is projected, and the treatment it receives in such environment, instead of always being directed by somebody from the outside about its own methods of production. Such information would be particularly helpful to students and parents who are interested in

choosing a college. This would be especially true with those students whose parents did not receive a college education. It might tend also to obviate some misunderstanding concerning the aims of college education. To be sure, many students attend a university because their parents graduated from that institution. Many others are influenced by the decision which their friends have made, but there are, nevertheless, many parents and students who would be glad to consider whether this college is properly equipped to give an adequate course in agriculture, or whether that college is strong in arts and sciences, or whether the other furnishes ample opportunities for sufficient education in engineering, or whether the moral and social welfare of its students is properly directed and safeguarded. They would be interested to know also more about the ability and personality of the teachers in the various departments, and whether the Freshmen are herded in large classes under the instruction of tutors and the raw Ph.D.'s, and whether the highsalaried professors and men who give the institution its standing spend their time with small classes or in research work. All of this information would be of great help to the educational adviser, whether he be teacher

Notwithstanding all this, today in our high schools and colleges great personalities, either because of choice or expedience, are often shunted off into research laboratories or into small classes composed largely of advanced students, instead of being placed in the most critical positions in the organizations. The failure to place teachers where they can be of the most service to the organization as a whole is the severest criticism which I can make on our high schools and universities today. To my mind our schools will not be fulfilling the object for which they were established until this defect is remedied.

Recently an impression was sent broadcast from one of our leading universities that men who are not productive scholars have no place there as teachers. Universities, this tells us, should not keep the mere teacher very many years, but should keep the good research man whether he can teach or not. I feel, on the contrary, that boys and girls at eighteen need teachers, not investigators in science or literature. It is not impossible for a man to be human and at the same time a learner. It is not impossible to be a guide and at the same time an explorer of new fields. The kind of personality which should be in charge of our young people, especially at the time when they enter a new environment such as the early years of high school or college, should be first of all a great teacher.

The colleges protest that it is impossible to give large Freshman classes to the few big men on their faculties. Instead, then, of dividing a class of a thousand students into small groups and assigning them for work to experienced professors throughout the year, they are often all assigned the first quarter of the year to various more or less inexperienced teachers or instructors of the school. Our best students come back to us protesting heartily at this treatment, especially in the Freshman mathematics and English. They speak of their disappointment in the uninspiring routine of their college English. As the best English student we ever graduated, now an honor boy at an eastern college, put it, "There is no life in the Freshman English here. I'd like to be back in the Senior classes in high school"; and another, in a college nearer home. said, "They parcel us Freshmen out to some fellows that have just graduated, and who need experience. We're the ones that get the experience, though. They may know a lot, but they can't teach." How many of us, I wonder, are guilty of a similar practice in our high schools?

If it is impracticable for the universities to modify their practices in these particulars, or if it be advisable to act on the assumption that certain universities were founded to do research work primarily, would it not be desirable that the secondary schools which are more nearly in touch with the general public be informed of the conditions which exist in such universities which pertain more intimately to the development of young people into efficient social beings? Here again I might say that our inspectors have no doubt served well the cause of education from our particular standpoint, but I have often wondered if they could not give some attention to enlightening the public on these points instead of spending most of their time in determining whether the students of some school have taken enough Greek, or whether the teachers have taken enough hours of history of education, or whether the janitor has kept the floors and windows of the school sufficiently clean to measure up to the ideal of some more or less fastidious inspector, so that the school may be accredited. At least some scheme should be devised whereby the secondary school public may be enlightened regarding these matters, so that they may exercise more intelligence in advising about the choice of colleges, and so that the advantage of a college education may not so often be a question for defensive argumentation.

If we cannot get this co-operation from the board of inspectors as it is at present constituted, would it not be possible to include in its membership, visitations, and councils some men who, with more recent experience, have more intimate knowledge of the aims and processes

of the modern high schools, or even some who are at the present time connected with such high schools, who could assist the inspectors as they deliberate and legislate on matters relating to the efficiency and standards of secondary schools? Might not the opinions of such men naturally be given some weight in reaching reasonable conclusions?

If this be impossible, is it not high time that the secondary schools created a board of inspectors of their own choosing to collect and distribute information concerning the subjects which I have mentioned and to formulate some conclusive judgments?

To summarize briefly, let me say that our educational policy, to be sane, should recognize that universities and secondary schools are primarily social organizations and are only phases of the larger social community; that they are dealing with the same individuals as those in the world at large, whose natural instincts and tendencies are susceptible to the same treatment here as they are in daily life; and that these institutions should consciously record in their scheme of administration a more adequate appreciation of the value of group activities in the educational process and should utilize them in the development of mental and moral character.

Next, there should be among high-school and college men more harmonious co-operation looking forward to the development of the boy and girl and not to the teaching of mathematics or history. We need to work with a clearer vision and a broader sympathy.

Again, we need such an administration in both high school and college as will insure adequate instruction in the most critical years and close contact with sympathetic teachers and advisers.

Furthermore, it is immaterial by what means and processes mental and moral fitness is produced, nor is there anything sacred in a period of four years. The recognition of motives and desires is far more important than insistence upon a passing grade. Motives for activity and creditable ambitions should be the prime essentials in determining promotion.

Finally, we need more information as a secondary-school community about the conditions under which our young men and women work when they enter college; we wish to know whether the so-called advisory system really advises; we need to know more about the moral and intellectual atmosphere, and whether it tends to develop right citizenship. In other words, inspection by the school for its own information and reformation would be more profitable from all points of view than inspection by the higher institutions for its information and the school's reformation.

At the business meeting which followed a constitution was adopted article by article. (The constitution will be found on p. 86.)

Election of officers for the year 1917–18 resulted in the election of President, Jesse B. Davis, principal of Central High School, Grand Rapids, Michigan; Vice-President, V. K. Froula, principal of Lincoln High School, Seattle, Washington; Secretary-Treasurer, H. V. Church, principal of J. Sterling Morton High School, Cicero, Illinois. Executive Committee: W. M. Butler, principal of Yeatman High School, St. Louis, Missouri; B. Frank Brown, principal of Lake View High School, Chicago, Illinois; Porter Graves, principal of Manual Training High School, Kansas City, Missouri; Edward Rynearson, principal of Fifth Avenue High School, Pittsburgh, Pennsylvania.

On motion the session adjourned.

FOURTH SESSION

The fourth session was held at 10:00 A.M. in the Banqueting Hall of the Coates House on Thursday, March 1, 1917.

Mr. Rynearson, principal of Fifth Avenue High School, Pittsburgh, Pennsylvania, presented his paper on "Supervised Student Activities in the School Program."

SUPERVISED STUDENT ACTIVITIES IN THE SCHOOL PROGRAM

EDWARD RYNEARSON, PRINCIPAL, FIFTH AVENUE HIGH SCHOOL, PITTSBURGH, PENNSYLVANIA

As you look back upon your school and college days, do you not feel that you derived great pleasure and much profit from the informal associations outside of the classroom? Even on the playgrounds of our elementary schools boys and girls learn many lessons that will be as valuable in later life as some of the lessons learned from books.

The school activities, if wisely planned, will assist in developing self-confidence and poise in the individual pupil, will assist in training the future citizens in leadership and in the many ideals and graces of true men and women, and, above all, will assist in making the spirit of democracy, "all for each and each for all," to pervade the entire school.

If school activities are, or may be, so important, can the high school afford to neglect them? We all know that the adolescent instinctively craves companionship. Without guidance we may have the gang on the corner, in the back alley, or in the shanty. One of the dangers of undirected activities is that the pupil thinks of personal pleasure only. With a little experience under direction he will soon realize that the highest happiness comes through service for others, that his knowledge and power are not attained in order that he may defeat some other fellow and thus get ahead, but in order that he may be enabled to assist his fellow-man and join in the uplift of his community. The study of civics has a deeper significance when the pupils are investigating some local problem or doing some practical work. One of the happiest group of boys I know is the technical section of our Senior class that has undertaken the responsibility of carrying a crippled girl up and down the stairs to her classes.

Such movements require tactful direction on the part of the school. Membership in these activities should be voluntary. They must not be dominated by the teachers, but should afford opportunities for pupil co-operation. Leaders are not developed and trained through lectures any more than swimmers are made through correspondence courses. Officers and membership on committees should be distributed through the entire student body and not all be given to the chosen few. Athletics should be made more democratic, as in the St. Paul school. Some of the activities, such as chorus and orchestra, should count for graduation. In many schools credit is given for the outside music, literary society, debating club, etc. The assemblies may be conducted in part or entirely by pupils. Dancing develops cliques and social castes and destroys democracy; this does not refer to folk dances and to other dances that require the mingling of those who take part. The finances of all activities should be under faculty control.

In order to encourage our pupils to take part in so-called outside activities, all except athletics are conducted during school hours. To do this the school day is divided into seven periods of forty-five minutes each instead of six of fifty-five minutes each. One period has been set aside for these activities. The question for us to decide was which period was to be used. The first and last periods were open to objections on account of encouraging lateness or early dismissal. We finally decided that the third period should be used for these activities and for class assemblies. No recitation is scheduled for this period. The first-

year classes are scheduled to a different teacher each day for study during this extra period. In this way we get some supervised study. The third period is used then for activities and for class assemblies; our assembly room will seat only 225.

When the activities are included within the school sessions more pupils will take part than when the sessions are held after school, as many do not want to remain. Teachers and parents object to boys and girls loitering in the school building or on the streets after dark. Again, the arrangement insures more regular attendance, since pupils have many errands, real or imaginary, after school. Then by beginning and closing at a definite time the programs, etc., are carried on in a much more businesslike manner than they were when the activities began ten to thirty minutes after school and closed whenever it was convenient. Under the present plan teachers render valuable assistance in guiding and directing all phases of the work. To do this work after school hours entails an unnecessary hardship on the few teachers who act as guardians.

As implied in what has been said, each activity has a guardian, appointed by the principal, who sees that the work of the activity justifies its existence. When he feels that the members use the period merely as a time to "whittle" he disbands the activity. It must be used, not abused; it should help in the socialization, not the demoralization, of the school. The members make their own rules, with the approval of the guardian, and elect their own officers. Since school time is used, the same rules apply to conduct and attendance as apply to any recitation.

The following rules govern the activities of the Fifth Avenue High School, Pittsburgh, Pennsylvania:

1. In order that the activities may be selected with discrimination, they are grouped as major and minor activities.

MAJOR

Baseball
Basket-ball
Class play
Major parts
Debating team
Football
Journal staff
Editor-in-chief
Business manager
Literary editor
Soccer ball
Society play
Major parts
Swimming-team
Track

MINOR

Camera club
Commercial club
Debating society
German club
Journal staff
Members of others than those
named under major
Literary society
Mathematics club
Penmanship club
Technical club

- 2. A pupil whose scholarship, strength, and conduct permit may belong to one major and two minors concurrently, or to three minors concurrently. No pupil may belong to more than one major activity at any one time.
- 3. A pupil who receives E (failure) in any subject shall be debarred from all activities, but may be restored when a passing mark is shown at the end of the next report period.
- 4. A pupil whose conduct shall be adjudged unsatisfactory by the committee on discipline shall be debarred from all activities.
- 5. A pupil who is late or absent twice during the school month without an excuse shall be debarred from all activities until he or she has no unexcused tardiness or absence for one month.
- 6. Before a pupil is enrolled in any high-school activity he must secure written permission from the guardian of the activity and the approval of the secretary of activities. The written permission and approval must be returned to the guardian of the activity who will keep it on file.

MEASUREMENT TESTS IN FIRST-TERM GEOMETRY

J. REMSEN BISHOP, PH.D., WAR CAMP COMMUNITY SERVICE, PRINCIPAL, EASTERN HIGH SCHOOL, DETROIT, MICHIGAN

The conviction that we have certain interests and certain aims in common has brought us together into this association. What all these aims and interests are no one of us would be able a priori to state. One by one they will appear as circumstances isolate and emphasize them.

Due to man's maladjustment to his physical environment he has always hoped for a better adjustment. If a patent medicine has promised this, it usually has had pathetically easy acceptance and, through mysterious psychological processes, has wrought some good where, antecedently, none was to be expected from the mere facts in the case.

In the domain of education, where the general aim is undoubtedly the cultivation of the individual with intent to making him happier and more useful in his span of life than, presumably, he would have been if unsubjected to the process, we have had the qualms and fears, the backing and filling characteristic of all human schemes. In fact, are not all the schemes of mankind that are directed toward a comprehensive management of the race's interests simply a series of faiths that are continually believed in, doubted, tested, discarded, and replaced by others, different if not better?

The object of measurement tests, as I understand them, is entirely constructive. The attempt to satisfy the test reveals something as to this particular kind of skill that is required, so that the satisfying of succeeding tests is progressively pleasant and profitable. A sense of power and improvement in performance are the intended results. Much of human endeavor is abortive and unsuccessful, so that any scheme to organize it upon a more efficient basis is hailed with joy.

To return to education, we find that an apparently growing mistrust of results has led to an extension of the cult of "efficiency" into the educational field. Do we get our money's worth to the greatest extent? Could we not, by changing our methods or by employing the force elsewhere, get more actual value for the expenditure? Far be it from me to decry this new emphasis upon the fact that there is an immense waste in the affairs of man and that by hardening his heart and taking thought he can probably save a great deal of this waste. Whether he thereby reduces the total amount of pain in the world or not he is at least making a brave effort to do so. Without fixing the blame he is apparently trying to make the incidence of disadvantage fall upon those who lack qualities that result in mechanical productiveness, which he translates as comfort.

It is then a mechanistic theory of man's function that now prevails, and one of the manifestations is mechanical measurement of the results of teachers' work. Assuming that all children are more or less alike or that they can be grouped by similarity, and that by some hook or crook a certain mechanical performance can be obtained from any group of pupils, we apply a series of mechanical tests and call the results, with some truth, measurements. To this are committed all the ambitious politicians that are bidding for the high offices in education, and woe betide any teacher over forty years of age and not a superintendent of schools who shall dare to question the efficiency of mechanical measurements. Only when some rank injustice has resulted in the case of teacher or school punished under the legalistic guise of mechanical measurement will there come sanity in this matter. It was promised that no comparison of schools or teachers was intended when these

mechanical tests were promulgated. Are those in authority fulfilling this promise?

If so elusive a performance as English composition is to be tested—the gods have as yet been unkind to those who chose this field of measurement—why not test every subject? The testing that every teacher does in order to discover the state of development actually attained by her pupils in the subject in hand is not at all satisfactory to the mechanical measurer; he seems to have started with a rooted prejudice or suspicion, or at any rate a penchant, against the teacher and her methods. Since those who have this attitude class themselves as teachers, this is probably a manifestation of a new *odium* born into the world, the *odium pedagogicum*.

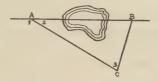
In order that results in geometry might be compared, it occurred to me that a series of tests might be evolved for which the class could not be prepared through purely memoriter work. It has been loudly disclaimed by the examiners that they have wanted, in geometry examinations, merely the reproducing of proofs contained in treatises. To take them at their word the proper mechanical tests should avoid, at least to a preponderating degree, memorized material that is not made functionally dependent on the exercise of independent thought. As a basis for the theme of this talk a simple examination was given to first-semester classes in geometry near the close of the semester. The questions were as follows:

- 1. Mark two points on a line. Draw perpendiculars to the line at three points. What is the relation of the perpendiculars?
- 2. Draw a diagram representing the rails of two intersecting railroad tracks. Point out all the equal angles in the figure. Give reason.
- 3. If an altitude of a triangle coincides with one of the sides, what kind of a triangle is it?
- 4. A straight line drawn through the sides of an isosceles triangle parallel to the base makes equal angles with the sides. Prove \angle 1 equals \angle 2.

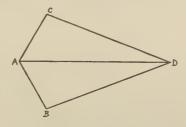


- 5. The diagonals of an isosceles trapezoid are equal.
- 6. How many degrees has each angle of an equiangular pentagon? of a hexagon? of a decagon?

7. In surveying, the distance from A to the inaccessible point B may be obtained as follows: Measure off AC until a point is found from which $\angle 3$ equals $\frac{1}{2} \angle I$. Then AB equals AC. Prove it.



8. In the kite shown in the figure, AB equals AC and BD equals CD. Prove that AD bisects $\angle BAC$ and $\angle BDC$.



9. The figure shows a form of instrument used for leveling. It consists of a rectangular frame with a plumb line suspended from the middle point of the upper side. A mark is placed in the middle point of the lower line. The lower side is placed on the surface to be leveled. Show that if the plumb line hangs directly over the mark the surface is level.



10. Prove that all the medians of an equilateral triangle are equal.

RESULTS OF TEST GIVEN AT END OF GEOMETRY I

Average boys and girls43.8 per cent
Average boys55.3 per cent
Average girls38.0 per cent
Teachers (average of pupils' marks) varied from 41 per cent
to 55 per cent.

The following tests prepared by A. L. Gordon, head of mathematics department, Eastern High School, Detroit, are designed both to test

ability and to suggest where strengthening is needed to withstand a further test on similar lines.

A. GEOMETRY I

- 1. Show how to construct angles of 30° , 150° , $22\frac{1}{2}^\circ$, $67\frac{1}{2}^\circ$, and 105° .
- 2. Show how to bisect an angle formed by two converging lines without producing the lines until they meet.
- 3. Show how to construct an isosceles triangle when the base and the vertical angle are given.
 - 4. Construct a triangle having given three sides.
 - 5. Draw a perpendicular to a line AB from C.

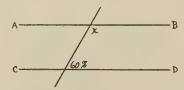


- 6. Divide a given angle in quarters.
- 7. Construct an angle that is double a given angle.

B. GEOMETRY I

1. Through a given point to draw a line parallel to a given line.

2.



Angle x equals how many degrees to make lines parallel?

3.



 \angle 1 and \angle 2 have sides parallel each to each and \angle to \angle 2 and \angle 3 have sides parallel each to each and \angle to \angle

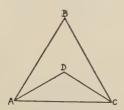
Prove \angle 1 equals \angle 3.

4. Prove bisector of an external vertical angle of an isosceles triangle is parallel to base.

- 5. How many diagonals can be drawn in a triangle? in a quadrilateral? in a hexagon?
- 6. What is the sum of the interior angles of a quadrangle? of a pentagon? of a hexagon? of a polygon of 100 sides?
- 7. Two sides of a triangle are 5 and 7 feet. Between what limits must the third side be?
 - 8. Can a triangle have for its sides 6 inches, 7 inches, and 15 inches?

C. GEOMETRY I

I.



AB equals BC.

AD and DC are bisectors of & BAC and BCA. Prove AD equals DC.

- 2. A line drawn perpendicular to the base of an isosceles triangle from vertical angle bisects base and vertical angle.
 - 3. If one angle of a quadrilateral is $\frac{5}{6}$ right angle, how large are the others?
- 4. The line joining the middle points of two opposite sides of a parallelogram is parallel to each of two other sides and equal to them.
 - 5. Given a diagonal, construct a square.
 - 6. Divide a line into five equal parts.
- 7. The lines joining the middle points of three sides of a triangle divide it into four equal triangles.

8.



ABCD is a rectangle.

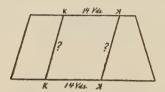
AE and CF are perpendicular to BD.

Prove AE equals CF.

The writer suggests also the following ten exercises to test progress in Geometry I, spaced one week apart over ten weeks.

- 1. Prove this theorem: If the sum of two adjacent angles is equal to 180°, their exterior sides form a straight line.
 - 2. Find the supplement of 32° and the complement of 88° 12′ 16″.
- 3. What angle is described by the minute hand of the clock in fifteen minutes?

- 4. The bisectors of two supplementary adjacent angles are perpendicular to each other.
 - 5. Two right triangles are equal if their legs are equal.
- 6. Bisect a line by making marks only on one side of it. With a measuring tape or an instrument how would you draw on the shore a perpendicular to the straight water line of a river?
- 7. Having an angle given, how can you construct its supplement? Show this by drawing an angle and constructing its supplement.
 - 8. How can a farmer tell whether the opposite sides of his farm are parallel?



- 9. If a straight line bisects two parallel lines, how many angles are formed? how many of the same size? Might they all be of the same size?
- 10. (a) Erect a perpendicular at the end of a line without producing the line. (b) Construct a triangle, given the three medians.

Principal W. A. Bailey, of the high school, Kansas City, Kansas, presented a paper on "The Administration of Quantitative and Qualitative Credit for High-School Work."

THE ADMINISTRATION OF QUANTITATIVE AND QUALITATIVE CREDIT FOR HIGH-SCHOOL WORK

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The bulletin of the Kansas City, Kansas, High School for the year 1915–16 contained the following announcement relative to quantitative and qualitative credit:

Beginning this year, grades of I, II, and III will count toward graduation as follows:

A grade of I will count as 1.2 units A grade of II will count as 1.1 units A grade of III will count as 1.0 unit

This differentiation in credit values is made for the reason that pupils who are able, under the same class conditions and in the same length of time, to acquire either a more thorough command over a definite amount of subject-matter, or over more subject-matter, than their classmates should be encour-

aged to do so and should be credited accordingly. By this system of credit a pupil who takes 5 subjects per year for three years and makes grades of I in all subjects can complete the 18 units of credit required for graduation from high school in the three years and devote the fourth year to junior-college work.

This weighted credit was determined on the following basis: Eighteen units of credit are required for graduation. At least 12 of the units must be earned in academic subject-matter. As many as 6 units may be taken in non-academic subject-matter. Each pupil doing normal work takes five subjects, four academic and one non-academic. All the subjects are equal in credit value. A pupil who, under this system of weighted credit, makes five grades of I, gets 6 units of credit. At this level he can secure the 18 units of credit necessary for graduation in three years. On this basis a grade of I was assigned a value of 1.2 units of credit; the next highest grade, a II, was given 1.1 units of credit; and the lowest passing mark, a III, was given 1.0 unit of credit.

At our first few faculty meetings of the year this system was discussed. All teachers agreed that it called for a more careful plan of grading than the old system; that, since it was the purpose of this system to encourage pupils to put forth their best efforts in the interests of higher scholarship, they should be made conscious of the way in which teachers differentiate between high and low scholarship; that one of the methods of making a grading system objective is to let pupils know in advance what work will be expected of them for the various grade levels.

It is a custom in this school to issue report cards for pupils every six weeks. At the end of the first five weeks of school I suggested to the members of the faculty that they write down the essential elements which they were going to consider in estimating their marks for the first six weeks' work and hand them to me at the beginning of the seventh week. There were reports from ten teachers of English, eight teachers of mathematics, seven teachers of foreign languages, five teachers of history, three teachers of commercial work, six teachers of the manual-constructive work, four teachers of art, and two teachers of physical-training work. I shall have time to call attention to only a few of the outstanding facts.

The most striking single fact was that teachers teaching within the same department were putting emphasis upon different things as bases for awarding grades.

Some science teachers insisted that the "power of observation" must be shown by a pupil before he could get any credit. Others never mentioned it. Some insisted that a pupil must recite so many times each six weeks to get a certain grade. Others did not even mention this

point. All agreed that all laboratory work must be completed before any credit would be given, and that frequent short tests were necessary as a basic part of their grading system.

The Latin reports showed practically no uniformity on the basic elements of grading. One teacher considered oral work, written work, and tests of equal importance in determining any grade regardless of what each one tests or how each is measured. She said nothing about the quantity of work a pupil should do for a given grade. Another teacher made quantity a definite part of his grading for the advanced work in Latin, and suggested that it should be taken into account in grading beginning Latin. Another teacher mentioned the following system of assigning credit: over 90 per cent equal to I; 80–90 per cent equal to II; 60–80 per cent equal to III; below 60 per cent equal to IV (failure).

One teacher of history made his main distinction in grades on "extra essays and oral reports." Another teacher, grading pupils in the same subject-matter, determined the standing of his pupils by judging them on attention, leading to interest; adaptability to the situation; degrees of initiative; habits of study, and various written exercises. Another teacher determined the difference in grades on the basis of the ability of the pupil to read and to tell in good English what he had read. No other elements were mentioned. Still another teacher took an entirely different basis for estimating grades; he made both the quantity and the quality of the work essentials in determining all his marks. He noted the attitudes of his pupils and tested them for memory, originality, and ability to study and grasp new facts. A study of this report showed that the methods of this teacher were totally different from the methods of the teacher previously mentioned, yet the two were teaching identical subject-matter.

The reports of four teachers of English showed interesting comparisons on salient points in marking English. The first, third, and fourth teachers said absolutely nothing about requiring more work from a pupil who makes the highest grade. The difference in marks was based wholly on quality. The second teacher thought that the stronger pupils should do more work with a higher quality. Teachers Nos. 1 and 3 spoke of grading pupils high who do "these things" in "as good a manner" as, or "better than," a high-school pupil is expected to do them. Teacher No. 1 said that the grade of II is the grade "a normal pupil receives when he does good, consistent work which shows gradual improvement." Teachers Nos. 1 and 4 thought a "keen appreciation

of literature" was necessary for a high grade. The other two did not mention this point. Teacher No. 2 thought that composition, both oral and written, which showed that pupils had habits of correct use of English should be graded high. Also pupils who have read literature until "phrases and extracts from reading appear in written and oral work" should get high grades. All of the teachers mentioned neatness, accuracy, attendance, and promptness in doing assigned work as essentials for different grades.

Another striking fact was that teachers of non-academic subjects were grading on some of the same essential elements as were teachers of academic subjects.

Throughout these reports teachers were found insisting on "neatness," "accuracy," "observation and originality," "quantity of work"; "I study my pupil hard and give the grades as an incentive and not as a penalty"; "work must be in on time"; "quality is permanent, quantity is cheap in the mechanical world"; "strict attention to class work"; "must show an interest in work"; "application"; "speed"; "good grades on examinations."

Enough of these reports have been mentioned to show (1) that the teachers had but vague notions of the elements which they took into consideration in determining grades; (2) that they had made no clear line of demarcation between the pupil just passing and the pupil doing the most excellent work; (3) that certain salient points are considered in grading all kinds of subject-matter; (4) the need of the co-operation of the faculty in determining in as precise and objective a manner as possible what are the distinguishing differences between work that should be given a high mark and work that should be given a low mark.

In an attempt to meet the needs just pointed out, I used the following plan. I selected from the fifty-one reports which the faculty turned over to me what I thought were the main elements mentioned by teachers of academic and non-academic subjects and had the list mimeographed. I gave each member of the faculty a copy, and asked him to study these elements carefully and to mark opposite each element the ranking he would give it in making up a grade, i.e., mark whether it should be required of a pupil making a grade of I, II, III, or IV. In some cases an element might be required of pupils of more than one rank; for instance, the point "neatness" might be required of all pupils getting a passing mark. From these rankings we obtained the following essential elements for grades of I, II, and III:

THE ESSENTIAL ELEMENTS FOR GRADE III

I.O UNIT OF CREDIT FOR GRADE III

- I. All the work asked of all the class, such as laboratory notebooks, themes, oral and written, tests, exercises, map-books, book reviews, notebooks, translations, etc., must be handed to the instructor before any credit will be given.
- 2. This work must be reasonably neat and accurate. *Poorly spelled* and *illegible work* cannot be accepted for credit.
- 3. Good attention and steady employment during the class hours are required of all pupils who are given credit for a course.

The quality of the work for this grade should be 75 per cent perfect.

THE ESSENTIAL ELEMENTS FOR GRADE II

I.I UNITS OF CREDIT FOR GRADE II

- 1, 2, 3 as previously given.
- 4. The average of all test grades must be II.
- 5. Pupils securing this grade must show some initiative in attacking new work, i.e., they should, by consulting such aids as a dictionary, indexes, collateral texts, etc., by reviewing what they have already learned, and by paying careful attention to the assignment, be able to get the advanced work without *much help* from the teacher.
- 6. In every particular the quality of the work for grade II should be superior to the quality of the work for grade III.
 - 7. Recitations should be well made without the aid of the teacher.
 - 8. Daily preparation of assignments.

The quality of the work for this grade should be 85 per cent perfect.

THE ESSENTIAL ELEMENTS FOR GRADE I

1.2 UNITS OF CREDIT FOR GRADE I

- 1, 2, 3, 5, 7, as previously given.
- 9. The average of test grades must be I.
- 10. Persistent daily preparation of assignments with but little urging and with but little help on the part of the teacher.
- II. Accuracy, neatness, legibility, correct spelling, must be the distinguishing characteristics of the work graded I.
- 12. The quantity of work done by a pupil receiving grade I should exceed that done by a pupil receiving grade II or III.

The quality of the work for this grade should be 95 per cent perfect.

We decided to make the pupils of the school acquainted with these essential elements of the various grades. Accordingly we had the elements for each grade printed, in type large enough to be read easily, on separate cards 19×30 inches in size. These cards are hung in every classroom in the building. Teachers and pupils discuss them frequently throughout the year and especially at the beginning of each six weeks' grade period.

It is evident that this differentiation in the essential elements which go to make up a certain grade, or grades, is primarily a qualitative and not a quantitative one. It will be noted, however, that element No. 12 states that the quantity of work done by a pupil receiving a grade of I should exceed that done by a pupil receiving a grade of II or III. The determining of the quantity of work to be done for a specific grade is a departmental problem. The teachers meet by departments at the beginning of each six weeks' period and agree upon the quantity of work which they will assign for the next six weeks for the various grades. These are written on a strip of cardboard furnished the teachers by the office, and appended to the card of printed essential elements. A copy of these quantitative requirements is filed in the office. I might state in passing that last year the range in the quantity of work expected of a pupil making a grade of III and a pupil making a grade of I was greater than this year. The teachers found that pupils were working to cover the quantity of work assigned and neglecting to check their quality. Also pupils who covered the quantitative assignments expected the grades promised for covering these quantities regardless of the quality of the work. This year the teachers are insisting that the pupils who get high grades must earn them by showing, primarily, superior qualitative work.

The following are examples of the requirements for the six weeks' periods handed to me:

REQUIREMENTS FOR FIRST SIX WEEKS IN 1916-17

BIOLOGY

Grade III on general class requirements

Topics:

1. Biology and environment.

2. Relations existing between green plants and animals.

3. Study of plants, a flower, parts, pollination, relation of insects, etc.

4. Living plants and animals compared.

5. Seed growth.

6. Need of foods. Plants and animals. Field and laboratory work. Text as guide.

Three class types

- (1. Study and recognition of trees and fruits by leaves, bark, etc.
- 2. Collection and mounting of 40 insects.
- types (3. Collection and pressing of 40 fall flowering plants and weeds.
 - 4. Assigned exercises on foregoing topics as laboratory work.
 - 5. Report on one reference reading from assigned list.
 - 6. Collection of clippings from current newspapers and periodicals.

Grade II

As above. With 5 more plants and insects, additional reference work, and laboratory work.

Grade I

As above. With 10 more plants, 10 more insects, additional reference work, and laboratory work.

REQUIREMENTS IN ENGLISH, OCTOBER 23 TO DECEMBER 1, 1916 ENGLISH 1-2

Grade III

- 1. Grade III in recitations.
- 2. Grade III in all class exercises.
- 3. Written themes, 3.
- 4. Oral themes, 3.
- 5. Classic, "Short Stories," 6 stories.
- 6. Spelling rules 1 and 2, and "a" and "b" words in Manual.1
- 7. Figures of speech: simile, metaphor, personification.
- 8. Home reading, 3 marks.2
- o. Reading report, 1 (written).
- 10. Memorize "Call of Kansas."
- 11. Comma rules in Manual.

Grade II

- 1. Grade II in recitations and class exercises.
- 2. Same as 3-11 in III.
- 3. Other work: 3 book marks or 3 written themes.

Grade I

- I. Grade I in recitations and class exercises.
- 2. Same as 3-11 in III.
- 3. Other work: 6 book marks or 6 themes (written), or 3 book marks and 3 written themes.
- ¹ Our English teachers last year published a manual containing certain principles of grammar and rhetoric which all Freshmen and Sophomore pupils must master.
 - ² Each book on the home reading list is evaluated as so many marks.

ENGLISH 3-4

Grade III

- 1. Grade III in recitations.
- 2. Grade III in class exercises.
- 3. Oral themes, 3.
- 4. Written themes, 3.
- 5. Comma rules in Manual.
- 6. Adjectives in Manual.
- 7. Verbs in Manual, first 24; sentence exercises.
- 8. Figures of speech.
- 9. Classic, "Ancient Mariner."
- 10. Home reading, 3 marks.
- 11. Reading report, 1 written.
- 12. Memorize "Ichabod."

Grade II

- 1. Grade II in recitations and exercises.
- 2. 3-12 as in III.
- 3. Other work: home reading, 3 marks, or 3 written themes.

Grade I

- I. Grade I in recitations and exercises.
- 2. 3-12 as in III.
- 3. Other work: home reading, 6 marks or 6 written themes; or 3 book marks and 3 written themes.

ENGLISH 5-6

Grade III

Reports on following:

Irving: Alhambra, 5 stories; Tales of a Traveler, 5 stories; Sketch Book, 5 stories.

Bryant: 10 poems.

Cooper: one book (home reading).

Memorize "To a Waterfowl."

All class exercises.

Halleck: chapters ii and iii.

Grade II

As under III and 3 book marks or 10 reports.

Grade I

As under III and 6 book marks or 20 reports, or 3 book marks and 10 reports.

A clear and definite differentiation in the work expected of the pupils for the various grades is made by our teacher of cabinetwork. The

following list of projects, with their evaluation in points, and the list of instructions are posted where all pupils may read them.

LIST OF PROJECTS, CABINET DEPARTMENT

	The feeder	Project	Points
Project	Points	•	
Phone stand	10	Dressing table	20-40
Blacking stand	10	Music cabinet	25
Umbrella stand	14	Settee	25
Chair	18	Morris chair	25
Piano bench A	18	Rocking chair	22
Piano bench B	18	Center table	15
Piano bench C	20	Plate rack	8
Medicine cabinet	20	Hall tree	18
Checkerboard	10	China cabinet	35
Glove box	8	Buffet	45
Pedestal	12	Sewing chair	18
Serving tray	8-10	Typewriter table	16
Cedar chest	20-30	Porch swing	20
Library table	20-35	Center table	20

All projects designed by pupils other than those on the accompanying list must be submitted to the teacher for approval and given the number of points allowed for construction.

Points are arranged according to tool processes, construction, and finish.

REQUIREMENTS IN CABINETWORK GRADE III ~

Thirty-four points must be made with an average of at least 70 per cent. Any number of the foregoing points may be made by the pupil by doing general shopwork. Part of each pupil's time is to be spent doing general shopwork and credit is to be given according to the amount and quality of the work done.

A pupil must:

- 1. Form the habit of taking proper care of the tools and returning them to their proper places.
- 2. Learn that his job is not the only job in the shop and that he must have due regard for the work of others and be careful not to do anything that will injure or prevent another pupil from getting the best results from his labor.
- 3. Learn that the time that he takes to do a piece of work is often the greatest factor in the cost of the article, and that, no matter what his future line of work may be, his employer will rate his value to him by what he can do, how well he can do it, and how long it takes him to do it.

- 4. Learn that to work the problems out in the shop correctly requires him to do just as much thinking, just as much planning, as it does to do the work in any of his other classes, and that his shopwork calls for an application of the subject-matter that he is taking in other classes.
- 5. Learn that he is only a factor in the daily routine of life, and that often it is how well he does his part and how well he co-operates with others that determines the success or failure of the undertaking at hand.
- 6. Learn not to expect to receive direct answers to questions he asks about work when such answers are found on the drawings, or when the answer may be obtained from some part of the project he has on hand, or by the application of a little systematic thinking and simple mathematics.
- 7. Learn to make all his construction work substantial, and have all finished parts reasonably well cleaned of all blemishes, and at least one coat of stain, one coat of shellac, and one coat of wax applied.
- 8. Learn to sharpen all edge tools properly on the oilstone and grind at least one jack plane cutter, one smooth plane cutter, and one chisel.
- 9. Know the names of all the tools used in the shop, how to set them up, and how to use them properly.
 - 10. Be able to tell the difference between a cross-cut saw and a ripsaw.
- II. Know the common wood fastenings, common nails, casing nails, finish nails, as well as flat-head, round-head, and oval-head screws.
 - 12. Know what gimlets are and how to tell the size of them.
 - 13. Know what auger bits are and how to tell the size.
 - 14. Know what Forstner bits are and how to tell the size.
 - 15. Be able to file and burnish a cabinet scraper properly.
 - 16. Be able to square up framework by the use of the diagonals.
- 17. Know what glue is, how it is made, and how to prepare it for use in the shop.
- 18. Know the kinds of joints commonly used in cabinet construction and how to make them.
- 19. Be able to recognize the different kinds of wood commonly used in the shop.
- 20. Know the methods of sawing lumber and the reasons for quartersawing and the advantages to the cabinetmaker.
 - 21. Be able to read a simple working drawing.
 - 22. Be able to make out a bill of material for a small project.
- 23. Be able to figure the amount of lumber, board measure, that is required to make a given project.
- 24. Know the use of stains, fillers, shellac, varnish, sandpaper, pumice stone, rotten stone, rubbing oil, and steel wool.

GRADE II

All requirements for a grade of III apply to a grade of II.

Forty points must be made with an average grade of at least 85 per cent.

All construction work must be substantial and well squared up.

All joints must be made properly and well fitted.

All blemishes, pits, plane marks, and saw marks must be removed, so that after the stain, filler, and varnish are applied the project has a smooth, clean appearance.

All edge tools used by the pupil must be properly ground by him and sharpened properly on the oilstone.

The pupil must show some ability to go ahead with his work properly without the constant supervision of the teacher.

GRADE I

All requirements for a grade of III and II apply to a grade of I.

Fifty points must be made with an average grade of at least 95 per cent.

All construction work must be rigged well, squared up, and done in a masterly way.

Broad surfaces must be well leveled.

All parts to be finished must be free of all marks that detract from the finish of the product.

All coats of finish necessary to give the right kind of a finish to the project must be applied properly.

All layouts must be done accurately by the proper methods.

The pupils must be able to work accurately to the given dimensions.

The pupil must show a marked ability to solve the problems in the shop without the aid of the teacher.

For the last half of the school year 1915-16 I asked each teacher to hand to me her distribution of grades. The card used for this purpose follows:

DISTRIBUTION OF GRADES

	Teacher		Date		oject
		I	11	III	IV
	Number enrolled				
Boys ·	Per cent				
6:1	Number enrolled				
Girls	Per cent				
Both	Number enrolled				
Doin	Per cent				

From these cards I had graphs made for the various departments and we discussed them at faculty meetings. A large percentage of

pupils were getting excess credit. The teachers attributed this to the fact that it had been customary for pupils to make high marks in this school and that pupils met the quantitative assignments.

The year closed with the distribution of grades shown in Table I:

TABLE I

	I	п	m	IV (Failure)
1915–16 1914–15	21.0 33.6	27.7 36.8	38.7 24.2	12.6 5·4

This distribution is far from what is known as a normal distribution, but as compared with the distribution for 1914–15 it was much nearer normal.

The results of the first year's (1915–16) work under the system of quantitative and qualitative credit were studied at the opening of the school year of 1916–17 by the faculty as a whole and by departments. The teachers were well pleased with the principle of the system, but felt that the following changes in administering it should be made: (1) If pupils are to be given excess credit for superior work they ought to be penalized for inferior work, but not failed except for very inferior work.

(2) The emphasis in urging pupils to do superior work ought to be placed on a higher quality of work and not on a greater quantity of work.

(3) Teachers ought to study their distribution of grades and be sure

(3) Teachers ought to study their distribution of grades and be sure that pupils are assigned the credit due them. (4) Pupils should be made to compete within their own class; that is, Seniors should not be allowed to enter Freshmen classes and get the same credit as Freshmen for the same work.

In conformity with recommendation (1) the credit system illustrated by Table II was adopted:

TABLE II

	Grades								
	I	II	III	IV	v	VI			
Credit value in units Percentage		1.1 85-94	1.0 70-84	0.8 65–69	0.5 60–64	o.o Below 60			

The wide range of 70 to 84 per cent inclusive for a grade of III was made because we felt that the pupils who fall within this range would

most nearly represent the "average group," if there is such a group, and our work ought to be so planned that this group should be given the normal unit of credit. No credit was assigned to work graded lower than 60 per cent, because we use the plan of supervised study in our school. We have 60-minute periods in the clear. Approximately one-half of the time is given to study and one-half to recitation. The 0.5 of a unit credit should mean that a pupil has done more than merely sit in a recitation room and absorb what is going on. To reach 60 per cent even a bright pupil must put forth some effort. Also the slow pupil by working hard can get at least 60 per cent of the total work.

The pupil's grade card contains the following explanation:

SCALE OF GRADING

Eighteen units of credit are required for graduation, twelve of which must being in group 1. (Group 1 subjects are the purely academic subjects.)

A grade of I gives 1.2 units credit. A grade of II gives 1.1 units credit. A grade of III gives 1.0 unit credit. A grade of IV gives o.8 unit credit. A grade of V gives o.5 unit credit. A grade of VI gives o.0 unit credit.

Teachers make it clear to the pupils that this fractional credit is an administrative device for rewarding them for efforts expended and that probably outside of this school system it is valueless. As no fractional credit is given in a subject pursued less than a full year, no pupil has to repeat a subject in which he has less than a unit's credit.

A pupil is expected not to make a sequence of a subject in which he cannot earn a unit of credit. The only exception to this is English. In this we shall probably do as other schools have done, viz., enrol pupils according to their abilities.

When we commenced the study of the previous year's distribution of grades in the fall of 1916, there was some doubt on the part of a few as to the significance of this work. To get my point of view of this matter before them I issued a bibliography of the leading scientific studies which have been made in the standardizing and distribution of grades.¹ This bibliography was the subject of discussion in the first faculty meetings.

After much discussion of this bulletin we agreed that each teacher should graph her grades before giving them out. The "Distribution of Grades" card shown on page 70 was devised.

Page 71.

We have not adopted any particular curve of distribution. The distributions for the first three of the periods of six weeks each for this year are shown in Table III.

TABLE III

		Grades										
	I	II	III	IV	v	VI						
Credit values	I. 2 Units	I.I Units	I.o Unit	o.8 Unit	o.5 Unit	o.o Unit						
First 6 weeks Second 6 weeks Third 6 weeks	5·4 9.0 9·7	21.8 21.0 23.9	49.0 49.6 44.2	13.8 13.3 15.0	6.7 4.6 4.8	3·3 2·5 2.0						
Year 1915-16	21.0	27.7	38.7	I	2.6—Failu	re						

Various meanings may be read into these figures. According to the testimony of the pupils and teachers of our school they mean that the standards of the classroom work have been raised this year and that pupils are more nearly classified according to their efforts and abilities.

In order that this graphing may not degenerate into a mere mechanical device of shifting grades to make a certain curve to please administrative officers, we are planning this spring to give to all departments tests devised by impartial parties.

Personally, I do not believe that any system of grading and especially a system which utilizes the principle of quantitative and qualitative credit can be successfully operated without giving very careful attention to the distribution of grades.

The matter of sequence referred to above has been met by the following regulation:

With a view to keeping pupils working in the classes where they belong intellectually and to provide for proper sequence—beginning this year—all Junior and Senior pupils must select at least three-fifths of their subjects from the subjects listed for their respective years. Full credit will be given a pupil for a subject chosen from those listed for the class one year in arrear. Every subject taken two years in arrear of one's class shall be counted toward graduation at the rate of 0.2 unit less credit than the grade value earned: that is, a fourth-year pupil taking a second-year subject or a third-year pupil taking a first-year subject shall receive only 1.0 unit of credit toward graduation for a grade of I, whereas a second-year pupil or a first-year pupil shall receive 1.2 units' credit for the same

grade. Every subject taken three years in arrear of one's class shall be counted toward graduation at one-half the grade value earned: that is, a fourth-year pupil taking a first-year subject shall receive only 0.5 unit credit toward graduation for a grade of III, whereas a first-year pupil shall receive 1.0 unit credit for the same grade.

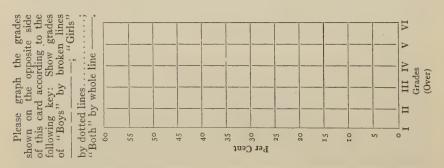
DISTRIBUTION OF GRADES

(USE ONE CARD FOR EACH SUBJECT TAUGHT)

Teacher						Date						Subject					
			SED TH ADE II OR TER	PERMANENTLY	WITHDRAWN		[1	I	11	II	I	v		7	v	I
	Ž	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Boys																	
Girls																	
Both																	

N.B.—Determine the per cent to tenths of a per cent. For example: 9.8%.

Be sure your per cents total 100.0%. (Over)



There is still one integral part of the scheme of administering this system which we recognize, but which we have worked on only in so far as has been heretofore pointed out in this paper. I refer to the standardization of subject-matter. We believe that every subject in the

curriculum should be standardized on some such plan as suggested by Dr. Judd in his address before the North Central Association of Colleges and Secondary Schools in 1916. That is, the subjects should be standardized with relation to each other, with relation to the methods employed in teaching them, and with relation to the subject-matter contained within them. This is surely necessary before we can feel that varying credit in one school will mean or even approximate in meaning the same as varying credit in another school.

Our experience in administering the system of quantitative and qualitative credit for high-school work has brought us to the conclusion that the principle is sound, fair, and practicable under the following conditions:

- I. Teachers should make a practice of putting clearly before their pupils the essential elements, stated quantitatively and qualitatively, which they are going to consider in making up the various scales of credit. This helps pupils to direct their energies more economically and more intelligently, and they will do their work more willingly and with greater interest, and take the grades assigned them with the feeling that they have received what they earned.
- 2. Teachers must be made to study the distribution of their own grades and the grades of the entire faculty. Possibly it would be well in high schools with large enrolments for the principal with his faculty to decide on some definite mode of distribution similar to those reported in use in the colleges and universities referred to in my bibliography.
- 3. Pupils must not be allowed to make excess credit in subjectmatter which is not intended for pupils of their advanced intellectual attainment.
- 4. Curricula, subjects, and methods must be more fully standardized before the system of quantitative and qualitative credit can mean the same thing in different schools.

BIBLIOGRAPHY

- I. GENERAL DISCUSSION OF THE PRINCIPLE AND THEORETICAL SCHEMES PROPOSED TO CARRY IT OUT
- 1. Cattell, McKean. "Examination Grades and Credits," Popular Science Monthly, LXVI, 367-79.
- 2. Foster, William T. "Counting Quality as Well as Quantity for College Degrees," Administration of the College Curriculum, pp. 233-50. Boston: Houghton Mifflin Co.
- 3. Hoblitt, Merritt L. "The High-School Unit, Quantity, Quality, and Credit," School Review," XXIII, 303-6.

- 4. Hyde, William DeWitt. "The Adjustment of the Small College to Our Educational System," Outlook, LXXI, 886-89.
- 5. Judd, Charles H. "Formalism in Defining High-School Units," School Review, XXII, 649-65.
- 6. Judd, Charles H. "The Qualitative Definition of High-School Units," School and Society, III, 149-58.
- 7. Kelley, E. J. "Concerning the Evils of Credit for Quality as Enumerated by Professor Ladd," *Educational Review*, XXXVII, 516-19.
- 8. Kellicott, William E. "The Examination of Certain Objections to the Missouri System of Grading," School and Society, II, 81-88.
- 9. Ladd, A. J. "Credit for Quality in Secondary and Higher Education," Educational Review, XXXVII, 298-305.
- 10. Meyers, Max. "Is Credit for Quality Sound—A Criticism," School Review, XXIII, 708-10.
- 11. Ruediger, W. C. "Credit for Quality," School and Society, III, 207–8.
- 12. ——. "Is Credit for Quality Sound?" School Review, XXIII, 450-54.
- Secor, W. B. "Credit for Quality in Secondary Education," Educational Review, XXXV, 486–90.
- 14. Squires, Vernon P. "Concerning the Evils of Credit for Quality," Educational Review, XXXVIII, 90-92.

II. ACCOUNTS OF SYSTEMS UTILIZING THE PRINCIPLE

- 1. Johnson, Franklin W. "Credit for Courses in the University High School," School Review, XXIII, 715-18.
- 2. Kennedy, Joseph. "Credit for Quality in the University of North Dakota," Educational Review, XXXII, 525.
- 3. Meyers, Max. "Experience with the Missouri Grading System," Science, N.S., XXXIII, 661-67.
- 4. Mitchell, H. B. "Honor Courses in Colleges," *Educational Review*, XL, 217-28.
- 5. Varrelman, F. A. "Grades for Merit," School and Society, II, 605.

III. STUDIES OF GRADE DISTRIBUTION

- 1. Albright, G. H. "How Teachers Mark," School and Society, III, 426-27.
- 2. Benedict, H. Y. "Grades and Their Standardization at the University of Texas," School and Society, III, 105-7.
- 3. Brown, Robert C. "Uniformity of Grading in Colleges and Universities," School and Society, I, 32-35.
- 4. Cajorie, F. "New Marking System and Means of Measuring Mathematical Abilities," Science, N.S., XXXIX, 874-81.
- 5. Canning, J. B. "The Meaning of Students' Marks," School Review, XXIV, 196-202.

- 6. Foster, William T. "The Need of a Scientific Distribution of College Credits," *Popular Science Monthly*, LXXVIII, 388-408; also in *Administration of College Curriculum*, pp. 250-303. Boston: Houghton Mifflin Co.
- 7. Hall, W. S. "A Guide to the Equitable Grading of Students," School Science and Mathematics, VI, 501-18.
- 8. Kelley, J. F. "Teachers' Marks," Contributions to Education, Teachers College, Columbia University.
- 9. Ruediger, W. C., Henning, Ges. H., and Wilbur, William A. "Standardization of Courses and Grades," School and Society, I, 642-43.
- 10. Rugg, H. W. "Teachers' Marks and Marking Systems," Educational Administration and Supervision, February, 1915.
- II. Sechrist, Frank K. "The Process of Examining," Educational Review, L, 399-417.
- 12. Starch, Daniel, and Elliott, Edward C. "Reliability of the Grading of High-School Work in English, History, and Mathematics," School Review, XX, 442–58; XXI, 254–60, 676–82.
- Mr. I. M. Allen, of the high school, Springfield, Illinois, gave his paper on "Experiments in Supervised Study."

EXPERIMENTS IN SUPERVISED STUDY

I. M. ALLEN, PRINCIPAL, HIGH SCHOOL, SPRINGFIELD, ILLINOIS

Dissatisfaction with the study habits of high-school pupils led me, as I suppose it has led every other manipulator of supervised-study schedules, to break with customary administrative programs. Investigations carried on by Giles, Reavis, Breslich, Minnick, Burch, and Alfred Hall-Quest with reference to the study habits of high-school pupils lead us to the following conclusions:

- 1. That high-school pupils do not, as an average, devote in and out of school much more than thirty minutes to the preparation of a lesson.
- 2. That very few high-school pupils preparing lessons at home establish regular and systematic study habits.
- 3. That the pupils who need most to establish proper study habits come largely from homes that fail to encourage or to make possible such habits.
- 4. That the larger percentage of pupils prepare lessons by the "close the book and recall" method of preparation.
- 5. That the slower pupils in mathematics classes conducted on the no-home-study plan do better work than in classes conducted on the home-preparation plan.

6. That high schools under the usual form of schedule do not offer instruction in "how to study."

I. MECHANICS OF SUPERVISED STUDY

The lengthened divided-period plan is probably the best-known supervised-study scheme. Its technique and operation are described in Johnston's *Modern High School* and in the December number of the *School Review*, 1916.

This plan of supervised study was used by the writer as early as September, 1911. Briefly described, the seven or eight periods of the orthodox high-school schedule are telescoped into four or five periods, and each resulting period then stretched into one of combined recitation and study. Such a schedule generally consists of five periods from sixty to eighty minutes, or four periods from eighty to ninety minutes, in length. The school day is lengthened by one hour. Beginning with five sixty-minute periods of combined recitation and study, I was soon convinced that twenty minutes for study was not long enough. It was neither hay nor grass.

The following year the five periods were lengthened to seventy minutes and divided equally between recitation and study, and subsequently the schedule was extended to seventy-five minutes with forty minutes for recitation and thirty-five for study.

After experimenting with supervised study over a period of four years I made the following recommendation to the Board of Education of Wichita, Kansas:

The statistics of scholarship accumulated over a period of four years seem to indicate conclusively that the administration of a supervised-study schedule reduces the percentage of failures and eliminations. After evaluating all of the statistics and weighing carefully all of the objections urged against the plan, I recommend that the system be continued and suggest the following modification of the system:

First, allow forty to forty-five minutes for recitation.

Second, arrange at least forty minutes for study, instead of thirty, and under no circumstances allow the teacher to trespass upon the pupil's study time.

Third, as soon as possible train teachers in methods of teaching pupils to study.

Obviously two prime objections stood against supervised study after several years of trial in one school: one against the mechanics of the scheme and the other against its dynamics.

Mechanically supervised school study to be effective requires an adequate period for its administration. Nothing less than forty to forty-five minutes will suffice. As one high-school boy put it, "Our present thirty-minute supervised-study period (when the teacher does not steal it) leaves us with little dabs of lessons left over, with just as many books to carry home, and the best part of the day gone."

How to get an eighty- to ninety-minute period without lengthening the school day beyond four o'clock and beginning it before eight-thirty is a problem in the mechanics of supervised study. It may be solved in two ways:

- I. A five-period program may be operated on the floating- or displacement-period basis. For instance, the fifth period may displace in turn each of the four preceding periods on each successive day of the week, and on Friday it would displace itself. This results in a four-period-a-day schedule or a maximum of twenty recitations per week for each subject. This is my present method of securing a four-period-a-day schedule in the high school at Springfield, Illinois.
- 2. Another way is to arrange a four-period-a-day schedule with a maximum of twenty-five recitation periods per week. This is the simplest and best method, but is evidently 25 per cent more expensive in teaching force, and is consequently prohibitive in many schools. This plan is explained in the *School Review* for December, 1916, by Principal Roberts.

It may be conceded then that the mechanics of supervised study for both large and small high schools may be solved without increasing the teaching force. Six-, seven-, or eight-period-a-day schemes may be transformed automatically into a corresponding four- or five-supervised-study-period schedule.

II. DYNAMICS OF SUPERVISED STUDY

Our problem in dynamics still remains, however. After we have mechanically constructed a period for supervised study, how are we going to secure it? How are we going to teach pupils how to study? What will it profit a school to have gained a supervised-study schedule and missed supervised study itself? This is the all-important question. On this answer hangs all the law and gospel of supervised study. Whipple says:

Students in both high school and college have been studying, it is true, for years, but too often they have not been studying efficiently, have not formed right habits of mental work, and indeed do not even know how to go about the

development of an adequate method or plan of such work. . . . It is safe to say that failure to guide and direct study is the weak point in the whole educational machine.

The lengthened divided-period plan of schedule provides in itself the *conditions* necessary for effective study by making both time and place for study regular and automatic and by increasing the opportunity for focalization and concentration of attention. Immediately and automatically following a recitation with an opportunity to prepare the next day's lesson under the direction of the same teacher will not *ipso facto* create an efficient learning response on the part of all students, but it will *make more probable* such a response.

It has been erroneously assumed by many writers that supervised study was synonymous with effective study. It has been taken for granted that schools administering supervised-study schedules taught pupils how to study. There is a wide difference between *more* study and *effective* study. Supervised-study schedules may secure the former and miss the latter. Effective study depends upon many elements, among them proper time and place, concentration, reading ability, organization, habits, questioning habits, and memory. Supervised-study schedules mechanically provide for the first two and more nearly secure the third than do other devices. The remaining elements involved in the technique of study are not necessarily concomitants of so-called supervised study.

Time, place, and mental attitude—these three are the triune planks in the supervised-study platform. But let no supervised-study-schedule manipulator delude himself into believing that these three plans constitute the whole platform of effective study. No mechanical devices ever invented will solve this trick in the dynamics of learning known as "how to study."

In 1915 I advised that teachers should be taught the methods. The following year "Why and How to Study" blanks were pasted in every pupil's book with varying instructions for the different subjects. The technique of learning was analyzed, and teachers and pupils were made familiar by printed instructions of how to master it best. By telling him how to do it we might as well expect a boy to get the trick of throwing a twelve-pound shot. Two factors are necessary in mastering any process, learning included: (a) capacity and (b) artistic exercise of one's capacities.

Evidently a supervised-study schedule is no *sine qua non* for securing the factors which depend so largely upon the personality of pupil and

teacher. Effective study so often appears the possession of the Lincolns and the Greeleys who knew no school schedules that one should speak guardedly about administrative school devices solving any dynamic problem in education. However, better study, more study, concentrated study, are desirable goals in school administration, and the improvement in the use of this lengthened divided period was the writer's next experiment.

The origin of the plan I am about to describe grew out of study of the classroom exercise in typewriting. In the typewriting class pupils remain in the same group, but are individually apart. A pupil taking typewriting may stay out of school for two weeks and return to the same group in his mathematics, Latin, and typewriting. In the last subject he starts in exactly where he left off with a distinct realization that his muscular-mental co-ordination has been impaired, while too often in the first two subjects he takes up the advanced work with his classmates apparently without any particular sense of loss. Why should he, if he makes his grade? Does he not figure out a distinct gain?

Two things differentiate the mechanics of the typewriting exercise from the mathematics and Latin recitations: (a) consecutive, daily assignments which the pupil may follow without the guidance of a teacher; (b) individual responsibility and progress or an accounting for individual differences. Apply these same principles to academic subjects and it becomes necessary to provide printed daily-lesson assignments and to check upon individual preparation of these daily assignments. One added factor, appears with the academic subject which uniquely distinguishes it from the manual, namely, the expression of the lesson ideas.

In typewriting the pupil during the exercise concretely and muscularly shows the teacher how well he understands the lesson. In academic subjects the understanding must first be tested by language expression. There is no machine yet invented for eliminating this language-expression exercise. Consequently for all academics there must always remain the recitation period. Throwing one's ideas into a language mold is not the same as expressing one's ideas by mechanical means. For this reason the recitation period must always be stressed.

These common and distinguishing elements of the manuals and the academics being considered, it appears that recitation groups should be organized on the basis of the preparation of definite unit assignments. Epitomized, pupils should not recite until they have prepared. This called

for a scheme that involved the execution of the following desirable goals already set forth:

A. Preparation: (1) auto-assignment of daily lessons; (2) advancement according to individually tested preparation.

B. Recitation or expression: (1) recitation only over work previously prepared; (2) recitation in groups selected on basis of preparation.

The evolution of a scheme that would incorporate these ideas resulted in what is now known as the Springfield laboratory-recitation plan.

III. THE LABORATORY-RECITATION PLAN OF SUPERVISED STUDY

It will be impossible in the narrow limits of this paper to do more than outline the laboratory-recitation plan of supervised study now in operation in the Springfield High School. The laboratory-recitation plan is based on the fundamental idea that recitation groups should be organized on the basis of preparation. Pupils need not recite on the day's preparation, but the recitation for the day is upon work previously prepared and tested. The recitation teacher knows that when his group assembles each and every pupil has previously prepared and has been checked in the work to be recited upon; otherwise the pupil would not be in the group. This is accomplished by the following modus operandi:

- A. Co-operating laboratory-recitation teachers.—Forty or fifty pupils are assigned to a certain laboratory-recitation period operated by two teachers—one the laboratory, the other the recitation, teacher—in adjoining rooms. While the laboratory teacher is supervising the preparation of lessons during the ninety-minute period, the co-operating recitation teacher is conducting recitations with groups of pupils taken from the laboratory on the basis of their preparation. For illustration, each Friday the laboratory algebra teacher in the second period will give the co-operating recitation teacher of that class and period the advancement of the slowest pupil in each of two or three recitation groups previously determined on the basis of laboratory preparation. The recitation teacher prepares his work for the following week on the basis of this information. If there are three groups, the recitation teacher devotes thirty minutes to each group; if two groups, forty-five minutes. The pupil spends either one-half or two-thirds of each period in the laboratory, the time depending upon the number of groups into which the recitation has been divided, and the remaining time in recitation.
- B. The laboratory technique.—Two things must be provided for: auto-assignment of lessons and checking of pupils on the lesson assignment. The first requires the printing of the daily lessons in manual

form and the second the checking of pupils by laboratory teacher and student assistants. The following are sample lessons taken from the algebra and Latin manuals:

FOR EXERCISE 52

DIFFERENCE OF SQUARES—INCOMPLETE MIDDLE TERM

- (1) Is the expression $x^4+x^2y^2+y^1$ a trinomial square? Why? What is a trinomial square and how recognized? What could be added to the expression above to make it a trinomial square? If such a number is added why must it be subtracted at the same time? How do you always tell what this number is?
 - (2) Factor the above problem: Solution:

$$x^{4}+x^{2}y^{2}+y^{4}$$

$$=x^{4}+x^{2}y^{2}+y^{4}+x^{2}y^{2}-x^{2}y^{2}$$

$$=x^{4}+2x^{2}y^{2}+y^{4}-x^{2}y^{2}$$

$$=(x^{4}+2x^{2}y^{2}+y^{4})-x^{2}y^{2}$$

$$=(x^{2}+y^{2})^{2}-x^{2}y^{2}$$

$$=[(x^{2}+y^{2})+xy][(x^{2}+y^{2})-xy]$$

$$=[x^{2}+y^{2}+xy][x^{2}+y^{2}-xy]$$

$$=[x^{2}+xy+y^{2}][x^{2}-xy+y^{2}]$$

How does this carry out the suggestion above as to adding and subtracting at the same time?

(3) In the second line of the above solution you should recognize the same type of problem as Exercise 50 and apply the same principle to the solution.

LESSON XIV

(Sec. 91-92-93-94-95; vocab. sec. 95) (Review vocab. 86, 90)

- r. How does the declension of nouns ending in "er" and "ir" differ from the declension of "servus"?
 - 2. How do we know when to keep "e" in the base and when not?
 - 3. How are adjectives in "er" declined?
- 4. What forms of the adjective show whether we keep "e" in the base or not?
 - 5. Prepare Application Card XI.

After the pupil in the laboratory has studied algebra lesson No. 52 or Latin lesson No. XIV, he is checked on his understanding of the lesson by a few individual test questions. If the pupil's preparation is satisfactory, he then calls at the clerk's desk for application cards No. 52 or No. XI and sets about to solve the exercises. These particular application cards are herewith reproduced:

CARD 52

Factor the following:

ı.	$x^4 + x^2y^2 + y^4$	II.	$a^4 - 11a^2 + 1$
2.	$4x^4 + 3x^2y^2 + y^4$	12.	64 <i>a</i> ⁴ + 1
3.	$9x^4 + 15x^2y^2 + 16y^4$	13.	$4x^4+y^4$
4.	$25x^4 - 6x^2y^2 + 9y^4$	14.	$x^4 - 107x^2y^2 + 169y^4$
5-	$x^8 - 8x^4y^4 + 4y^8$	15.	$x^4 - 95x^2y^2 + 169y^4$
6.	$25x^4 - 11x^2 + 1$	16.	x^4+4
7.	$x^{16} + x^4y^2 + y^4$	17.	25a4+116a2b2+144b4
8.	$x^{16} + x^8y^8 + y^{16}$	18.	64a4-1
9.	$16x^4 + 52x^2y^2 + 49y^4$	19.	$4a^2b^2 - 5ab + a^3b^3$
	$1-3a^2+a^4$	20.	$25x^4 - 5y^4$

APPLICATION CARD XI

- I. r. Cornēlius puerīs scūta et loricas dat.
 - 2. Dominī fīlīa pulchra in agrīs laborat.
 - 3. Est copia frumenti in oppido.
 - 4. Lēgātūs est apud legionārios sed servus est cum virīs.
 - 5. Līber Germaniae populus Rōmānōs non amat.
- II. 1. The pretty girls are hastening with the boys to the town.
 - 2. The men of Germany give plenty of money to the sons of the master.
 - 3. The friends of the free boys carry spears and shields.
 - 4. Who is the man with the horse and cart?

The solutions of exercises are checked by laboratory teachers and capable student assistants, and no pupil gets credit for the completion of a lesson and its applications until the laboratory requirements are satisfied. Pupils advance from lesson to lesson as fast as they are able. Initiative is encouraged, and the brighter students on the auto-assignment basis need little assistance. Other pupils, particularly the slow ones, are given the assistance needed, either individually or in groups.

Already a technique of manipulating laboratory work has developed which it is impossible to describe within the limits of this discussion.

C. Recitation technique.—As already stated, the co-ordinating recitation teacher in any period has pupils assigned to him on the basis of laboratory advancement. In some classes it is better to make three divisions, and in all, two. The recitation teacher does not conduct recitations on work concurrently prepared in laboratory, but upon prepared work, antedating the recitation, in the case of some students, several days. This, we believe, is a good pedagogical practice. Recit-

ing upon material which has been simultaneously prepared encourages cramming and rote memorizing. Recitation upon work previously prepared, but not for the particular recitation, develops selection, organization, and emphasis of certain lesson materials; while familiarity with advance material occupying the immediate laboratory attention affords an opportunity for more reflective, penetrating, and discriminating judgment upon the subject-matter of the recitation.

The recitation groups are flexible; pupils reciting in the advanced groups often find themselves demoted to a less-advanced group if it is discovered that their laboratory advancement has been too rapid. On the other hand, pupils are promoted to advanced recitation groups if it is found that their preparation warrants it.

D. Outstanding problems.—The specialization upon preparation and the conduct of recitation in groups determined by laboratory checks has caused one problem to stand out conspicuously. I say stand out. because I believe it has always existed but we have not been so painfully aware of its existence. Under this system the pupils unable to do the minimum, either because of lack of capacity or inability to exercise capacity, come at once into conspicuous view. We have repeatedly said, "Given time and attention, sympathy and properly motivated teaching, and any pupil will respond." Our system provides these essentials better than the old, but our problem in this respect is more acute than before. We actually know how long it takes some pupils to prepare their lessons, because the system calculates it. There must certainly be a point beyond which it is waste and useless effort. If a pupil cannot get thought from the printed page, then, instead of assigning him to regular literature and history courses, he should be assigned to a special class where the preparation of the lesson consists primarily in assistance in reading and selection of ideas from the page, and the recitation is an exercise in thought development and expression. This is the direction in which we are being pointed at present, and another year may see undertaken some experiment of this nature.

IV. A CONCRETE ILLUSTRATION FROM THE LABORATORY-RECITATION PLAN

Perhaps the best way to illustrate the application of the foregoing plan would be actually to take a pupil and carry him through both laboratory and recitation. This I have undertaken to do with a certain pupil, Robert, who prepares his oral-theme outline in laboratory, recites upon the same in his recitation group, reduces the same to writing in

laboratory, receiving his criticism thereon, and, finally, re-checks his written theme from these corrections. Ordinarily such a process would extend over a period of two days. Here Robert, for the purpose of this paper, continued his progress through laboratory and recitation during one afternoon, much to the loss of equilibrium for Robert, as he so declared in recitation.

A. LABORATORY ASSIGNMENT

CARD XX PART 2

Plan to tell orally to the class the most exciting adventure that has happened to anyone whom you personally know.

FIRST OUTLINE SUBMITTED BY ROBERT

WEALTHY FARMER HAS NEAR ESCAPE FROM DEATH

The lead: James Branden, a wealthy farmer living near Springfield, was saved from death yesterday when he leaped to an incoming passenger train.

Situation: Mr. Branden had gone to town on business and then returned home.

Climax: His car stopped on train tracks and the engine refused to work. Passenger train near the automobile of Branden.

Dénouement: He saved his life by springing from his car to the engine of the passenger train.

LABORATORY TEACHER'S CRITICISMS OF OUTLINE

- T.: What did you intend this first line for?
- P.: The first line is supposed to be the headline.
- T_{\cdot} : Do you see any mistake in grammar?
- P.: Yes-near.
- T.: What part of speech is near?
- P.: Verb.
- T.: Is it used there as a verb? How is it used?
- P.: It should be an adverb.
- T.: What does it modify?
- P.: In this sentence, escape.
- T.: What part of speech is escape?
- P.: Noun.
- T.: What do you call a word that modifies a noun?
- P.: An adjective.
- T.: Near is what, according to the dictionary?

- P.: Near means close.
- T.: What part of speech is near? May it be used as an adjective?
- P.: It probably could.
- T.: Where would you look to find out? Look that up.

Pupil consulted dictionary and found near used both as an adjective and an adverb.

- T.: What word could you substitute for near?
- P.: Narrow.
- T: Is there a difference between the two?
- P.: Yes. Near does not explain so much as the word narrow.
- T.: Your lead is good. Under your situation, this should be, "He started and was returning to his residence." Why?
- P.: Because he had not reached his home when this happened. I could say, "Mr. Branden had gone to town on business and started to return to his residence."

[The remaining portions of an extended conference are omitted.—EDITOR.]

OUTLINED FOR SECOND THRILLER (PREPARED IN LABORATORY BY ROBERT)

WEALTHY FARMER HAS NARROW ESCAPE FROM DEATH

The lead: James Branden, a wealthy farmer living near Springfield, was saved from death yesterday when he leaped from his automobile to the engine of an oncoming passenger train.

Situation: Mr. Branden had gone to town in his automobile on business and then started to return to his residence.

Climax: His car stopped on the railroad tracks and the engine refused to work. The passenger train neared the automobile of Branden.

Dénouement: He saved his life by springing from his car to the engine of the passenger train.

B. RECITATION

(Robert gives oral theme in recitation group)

A SECOND THRILLER

James Branden, a wealthy farmer living near Springfield, yesterday had a narrow escape from being killed. He was coming to town in his car. In the center of the railroad tracks it stopped. Mr. Branden tried to get the engine to work by means of the self-starter. He could not move it. He saw a passenger train approaching, but waited two or three minutes and grabbed a hold on the engine. Thus he was saved from being killed. In five minutes the train stopped and he regained his conscience. Now he was taken from his situation unburt.

CLASS CRITICISMS

He was familiar with his outline.

He followed his outline well.

It was good.

It held us in suspense.

T.: Another criticism to show its good points?

He had a good lead.

T.: Did he accomplish his purpose?

The thrill was all right, but was illogical. He saw a passenger train and waited two or three minutes and jumped on the car and in five minutes the passenger train stopped. Rather slow for a passenger train.

T.: What about the situation? Was that clear? What about the dénouement?

P.: Those were clear.

He said, "regaining his conscience" (sense or consciousness).

He said, "git and grabbed a hold."

He said, "He was taken from his situation unhurt."

He said, "Living near Springfield yesterday."

Change of verb tenses. Started with past and then said "he now" Incorrect pronoun: "When he got to the railroad track it stopped"

ROBERT: I had to go so slow for the stenographer to get it that I did not give it the way I wanted to.

A. Robert's Next Laboratory Exercise—Reduces Oral Theme to Writing

WEALTHY FARMER HAS NARROW ESCAPE FROM DEATH

James Branden, a wealthy farmer living near Springfield, was saved from death, yesterday, when he leaped from his automobile to the engine of an oncoming passenger.

Mr. Branden had left his farm, in the early part, in his automobile for town to attend to some business and had now started to return home by the way of Cook Street, a street which leads to his farm.

When his car reached the center of the railroad track on Third Street it stop. He tried to get the engine to work by pushing the self-starter with his foot, but it would not work. He then started to get out of his car to examine the engine, but so frightened, by the sight of an oncoming passenger train that he could not move hand or foot.

Finally he regained his senses and saw that the only way for him to save his life was to jump. Just as the engine of the passenger train was about to strike his car he sprang from his seat to a rod that was on the side of the engine and held there till the engine came to a stop. The enginere of the passenger train brought the engine to a stop and removed Branden from his place.

It was found that Branden received no injuries.

LABORATORY CORRECTIONS BY ROBERT

- 1. A comma is needed here. Rule. Every appositive should be set off by a comma.
 - 2. Word omitted, train. This is necessary to make sense.
 - 3. Words omitted, "of the day." These are necessary to the sense.
 - 4. Mistake in grammar. I should use the past tense, stopped.
 - 5. Word omitted, was. It is needed to finish the verb.
- 6. A new paragraph should not begin here, for this is not a new thought. It belongs with the sentence that precedes it.
 - 7. Mistake in spelling. It should be engineer.

The experiments with supervised-study schedules may be summarized as follows: (1) The mechanics of supervised study consist in securing a regular time and place for study and a concentration upon study during the school day. This is provided by the supervised-study schedule in which the period is from eighty to ninety minutes in length. The mechanical means of accomplishing this without unduly lengthening the school day has been explained. (2) The dynamics of supervised study refers to the mastery of the technique of study or to the art of how to study. The writer has never flattered himself into believing that so-called supervised study was synonymous with effective study.

Mr. Roberts in the December, 1916, *School Review*, in concluding his article on supervised study in the Everett High School makes a very significant statement:

We believe that supervised study in the form we have it is a success, but not the final solution of this great problem; it is a step, an arrow, at once an indication and the recognition of a tendency to correct one of the weak spots in our work. It will serve its day and purpose, and be superseded by some plan which will eliminate the difficulties and add to the advantages which we have noted for the double-period plan.

This is a view that I have always shared with reference to supervisedstudy schedules. The modification of supervised study to provide for individual differences under the laboratory-recitation plan outlined in this paper is in my opinion a direction of the "arrow" a little nearer the goal of effective study.

On motion the session adjourned.

CONSTITUTION

OF THE

NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

ARTICLE I-AIM

The aim of this Association is to promote the interests of secondary education in America by giving special consideration to the problems that arise in connection with the administration of secondary schools.

ARTICLE II-MEMBERSHIP

Any principal or executive head of a secondary school may become a member of the National Association of Principals of Secondary Schools upon the payment of two dollars.

The annual dues of members are two dollars, which shall be paid at the time of the annual meeting of the Association, or before April 1 of each year. A member forfeits his membership by failure to pay the year's dues.

The right to vote and hold office in the Association is open to all members whose dues for the year have been paid.

ARTICLE III—COMMITTEES

The president of the Association shall at the first session of the annual meeting appoint the following committees: A committee on resolutions to consist of seven members; a committee on nominations to consist of eleven members; a committee on necrology to consist of five members. These committees shall report at the annual business meeting of the Association.

ARTICLE IV-OFFICERS

The officers of the Association are a president, a vice-president, a secretary, a treasurer (or a secretary-treasurer), an executive committee composed of the four officers named, *ex officio*, and three additional members.

The duties of the president, vice-president, secretary, and treasurer are such as usually appertain to these officers. It is the duty of the executive committee to co-operate with the president in preparing the program of the meetings of the Association, and in carrying out the actions of the Association.

ARTICLE V-MEETINGS

The Association will hold one meeting a year. This annual meeting is held at the time and place of the meeting of the Department of Superintendence of the National Education Association.

ARTICLE VI—AMENDMENTS

The constitution may be amended by a majority vote of those present and voting at the annual meeting. A proposed amendment must be submitted in writing at the preceding annual meeting, or must be submitted in printed form to all members of the Association thirty days before the annual meeting. In case the latter method is used, such proposed amendment must receive the approval of the Executive Committee before it can be printed and sent to the members of the Association.

